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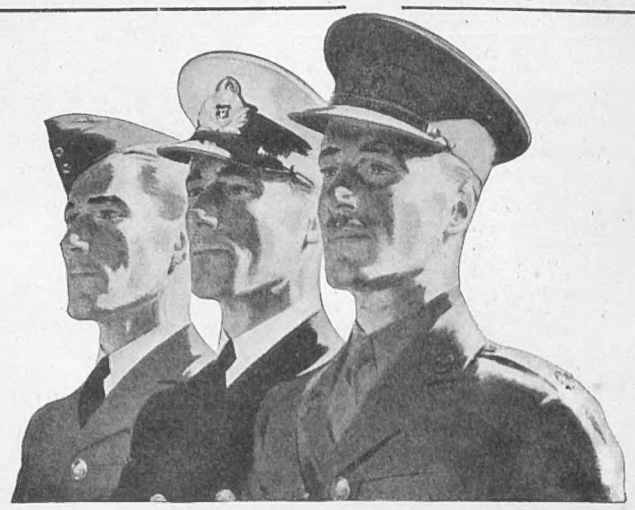

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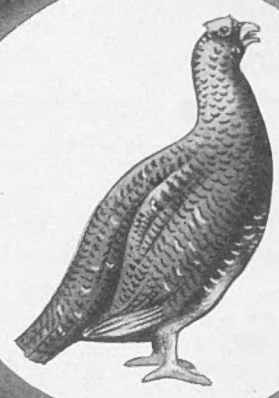

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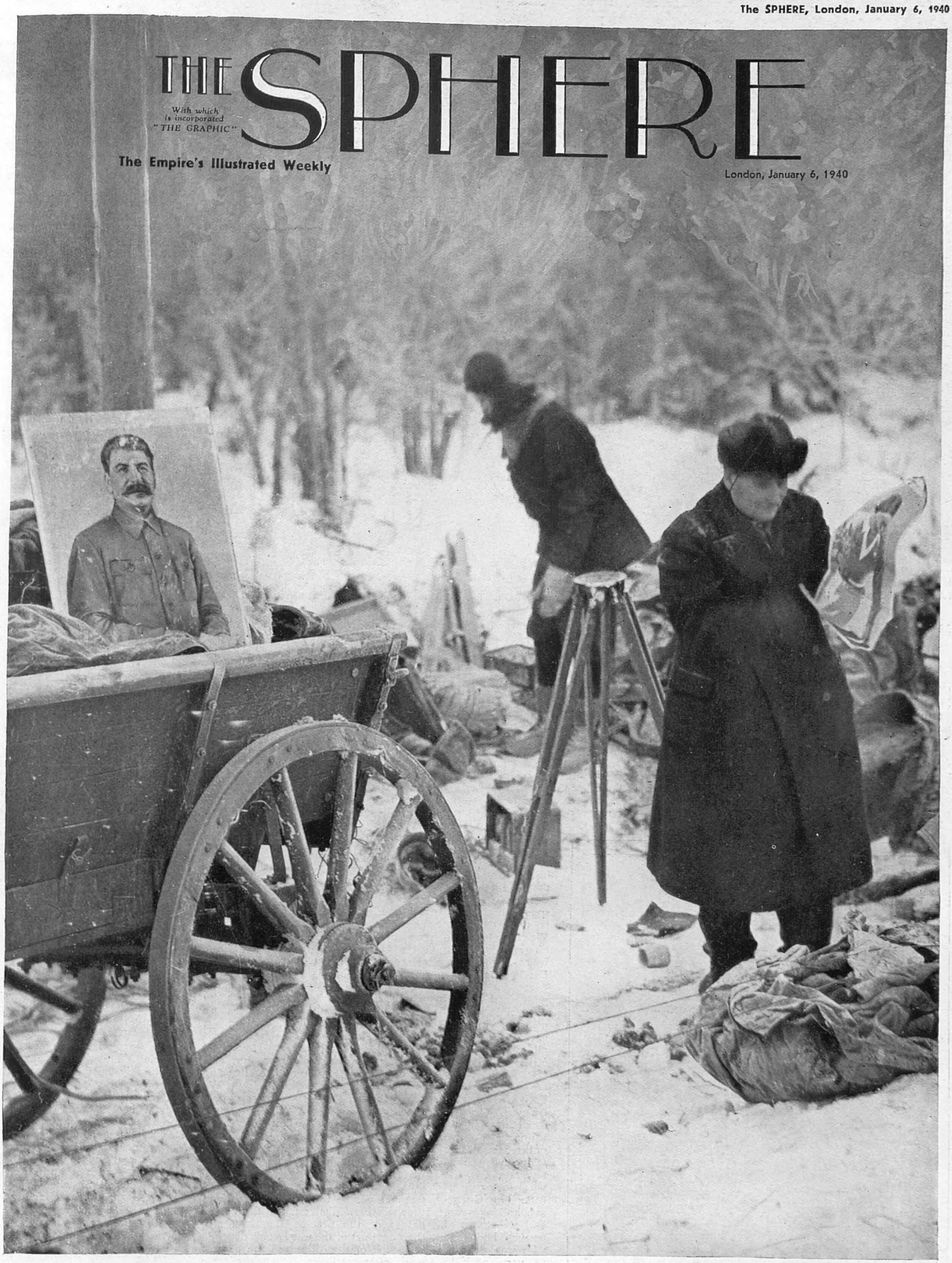
APPROVED BY DOCTORS

THE SPHERE

With which is incorporated "THE GRAPHIC"

The Empire's Illustrated Weekly

London, January 6, 1940



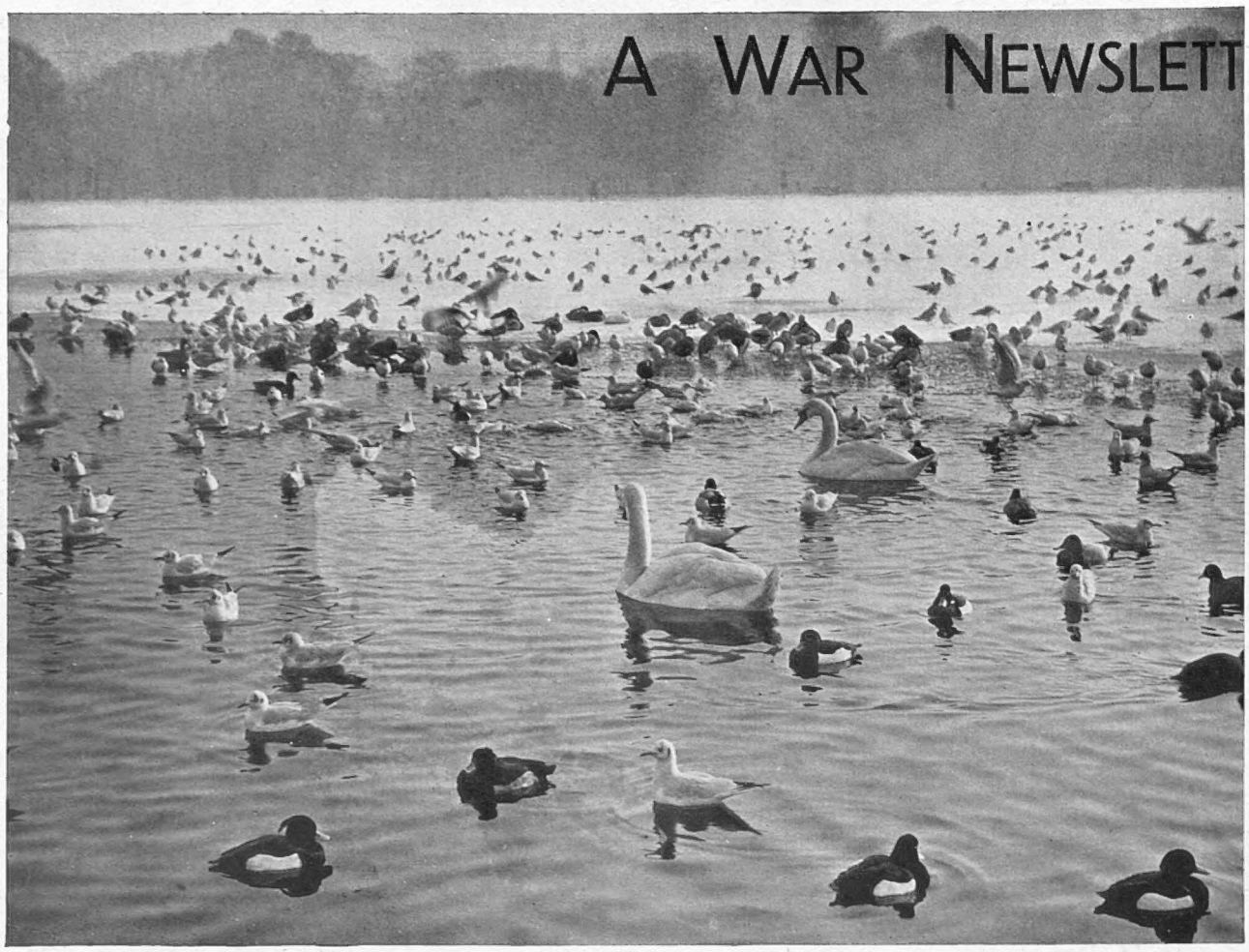
# THE FINNS CAPTURE PROPAGANDA LOOT

## During the Rout of the Russians in the Central Finland Campaign

Just before Christmas, the peril that Finland might be cut in two at its narrowest point seemed great. A Russian success here would have cut Finland clean in two midway, separating her completely from Sweden and Norway. It would have exposed the southern half of the country to envelopment by degrees and slow destruction. It would have meant separation from Scandinavia and the outside world by any but the most desperate means. The jeopardy was so great in the north that the Finns' friends everywhere trembled. But the Finns made their plans, having realised the weak points in the enemy's attack. Then they swept the invaders back right and left. And in the last fortnight they have succeeded in forcing back nearly 20,000 Russians and in surrounding 18,000. These were held in difficult terrain at the side of a lake for ten days until frost and hunger did their work. Then attack was simple and 8,000 prisoners were taken. Among the loot was a certain amount of propaganda material, films, and portraits of Stalin, to be used when the Russian forces had victoriously carried out their plans

Postage—Inland, 1½d.; Canada and Newfoundland, 1½d.; Elsewhere Abroad, 2d.

# A WAR NEWSLETTER—No. XVIII

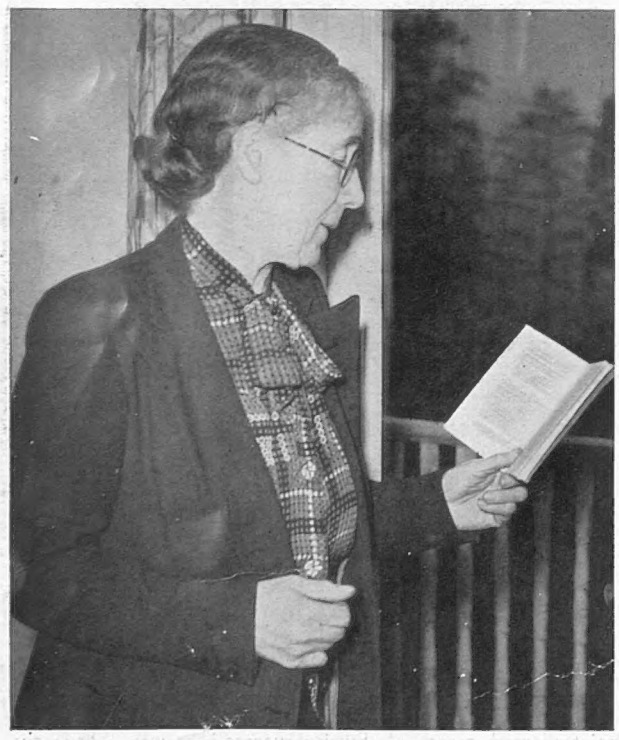


**LONDON'S WINTER BIRD-LIFE PRESENTS A FASCINATING SCENE IN KENSINGTON GARDENS**

The white and grey of the visiting gulls forms a beautiful setting for the more colourful ducks who are seen to advantage here, on the Round Pond, and from the bridge in St. James's Park. The swans move among the ducks like graceful liners

32–34, ST. BRIDE STREET, E.C.4
Wednesday, January 3, 1940

**BACK TO BUSINESS.**—The Christmas holidays are over and people have gone back to business. The main business of the day is killing human beings and destroying the labour of men's hands. In this business, the flower of youth, women and children and those works of men which are wrought for the welfare of humanity suffer as grievous loss as any. The young do the most of the killing and destroying. We older folk look on or labour to snatch what we can from the holocaust. How long would wars, waged under modern conditions, last if there were Christmas Days once a month? How often in a year could men screw themselves up to resume the imbecile bestiality of war after a *mi-carême* of comparative sanity and security and the opportunity it brings for calm reflection and self-examination? I think that the third monthly "Christmas" would bring the business to an end in a torrent of hysterics and a wave of shame. This—after 2,000 years of "progress" in a great ideal—is the best we can do as members of the chosen and privileged class in creation to adjust our differences—to rush into our nursery and with heavy outdoor boots to kick over each other's card castles, so painfully and carefully built up. And then—when the wave of fury spends itself—all is to do again. We stoop to build them up with worn-out tools. Let a man at home be honest with himself. Has a certain smug pleasure in the excitement of it all crept into his attitude to this war as a result of an unexpected immunity from immediate personal danger up till now? For two or three days there were no newspapers . . . the wireless gave us little but Christmas holiday news. Did we—those of us who had none who was dear to us very near to danger—find those days a little "dull" without the excitement of the regular bulletins . . . the reports of killings and sinkings and reprisals . . .? Did the Christmas interlude give us a shake-out and reveal the soul of humanity and the souls of individuals in their nakedness, dirtied with the slime of war? How many such Christmas shake-outs could humanity experience without throwing down its daggers and shaking hands on a new vow of allegiance to God and their fellows? One more oath to cleave to the narrow road of sanity and unselfishness and honour? If all the men who are fighting were free to think and free to voice their opinions and free to learn the truth. Aye, there's the rub. Propaganda is the sinews and the life-blood of war. Because it is powerful enough to keep two great nations enslaved in body and mind, we who *are* free to think and reason must go on with the dreadful business to the end.



**MISS M. L. HASKINS HOLDING A COPY OF "THE DESERT" FROM WHICH THE KING QUOTED IN HIS CHRISTMAS BROADCAST**

On the day after Christmas the name of Miss M. L. Haskins became known in every Anglo-Saxon land the world over. She is a welfare worker living at Crowborough and is the authoress of the lines quoted by the King at the end of his Christmas broadcast. This was the King's quotation:

"And I said to the man who stood at the Gate of the Year:
'Give me a light that I may tread safely into the unknown.'
And he replied: 'Go out into the darkness and put thine hand into the hand of God.
That shall be to thee better than light and safer than a known way.'"

**PROPAGANDA POLICY—A PLEA.**—"The Finns," said Lord Chatfield recently in a very fine, dignified broadcast, "need no propaganda." Their actions speak for them without need of words. And do not ours? Is it too much to hope that in 1940 some of our ministers will readjust their notions of what is essential national propaganda and restore that war arm to something more dignified and worthy and far-sighted and, in my view, more effective? It is not hid from us that Mr. Chamberlain's personal feelings towards Hitler are intensely bitter. How could they be otherwise? We are not surprised that Mr. Churchill's loathing of Nazi piracy is overmastering. We know that the ministers most closely concerned with propaganda believe in ruthless warfare and instant propaganda reprisal. But we very much doubt if unrestrained propaganda warfare pays. We know it is highly undignified and we see it as a vicious circle. I have said, and said again, that it is the German people who, win or lose (and they will certainly lose), will decide the nature of the peace. On them and their conduct of the war largely depends the spirit of the Allies and the neutral world after hostilities. It was the bitter spirit their brutalities engendered which defined the vindictive clauses of the Versailles Treaty and so embittered France and Belgium, not to say Britain and America. If by their acts they continue to show that they condone Nazi gangsterism, they will create the same spirit again.

**THE TRUTH IS GREAT ENOUGH.**—The Finns need no propaganda. The *Graf Spee*, lying at the bottom of the River Plate and her commander self-destroyed from shame, told the truth about that glorious action. Goebbels' lies did not make it a defeat for Britain or a victory for the Nazis. The neutral world is not composed of half-wits. On the contrary, it is composed of races some of whom are still remote enough from the war to foster and value the graces of civilised life, such as restraint and decency and good taste. I am constantly hearing from them how revolting they find the propaganda methods of *both* sides. Because Goebbels says our fishing boats are light warships, neutrals do not accept them as such. And when we plead before them *ad nauseam* the rightness of our cause, it only makes them wonder if we have something to be ashamed of. What should our Government's policy of propaganda be? To tell the truth. To declare our reasons for taking counter measures against Nazi breaches of international and humane laws. To contradict such Nazi lies as may be put out to justify further barbarities, but to counter Nazi lies about *their* "victories" and *our* "defeats" only by maintaining rigidly our reputation for telling the truth and only the truth. To resist cheap sneers, jibes and boasts—those things may safely be left to the cheaper press and to smaller men than ministers are supposed to be. In a word, not only to preach but to practise the maxim:—*Magna est veritas et prevalebit*. The dignity of our great Empire demands insistently that the policy in the paper war which some of our ministers have followed during the first quarter of this war year should be revised and purified by selection. We might take a lesson from the public utterances of French ministers.

**AMERICA AND OUR PROPAGANDA.**—I hear many views from America. One authority on whom I rely writes this week: "The whole country is pro-Allies. It might be cheaper in blood and treasure if we went in now but it cannot be done. The country is for keeping out of the war. I wonder if the British Government realises *how greatly we react against propaganda*. Occasionally a British speaker escapes from Great Britain and gets the people's backs up. Last Sunday in church a visiting English clergyman told us our duty and did not help matters. Let us continue to get the news from the Allies from American correspondents and let the radio news from England come as hitherto in good 'Amurican' accents. It will help a good deal." He encloses *inter alia* a clipping about Mr. Duff Cooper's propagandist tour. "He spoke (at Brooklyn) in a hall guarded by about eighty uniformed policemen . . . the building was picketed by men and women carrying signs characterising him as a 'war propagandist' and demanding that American neutrality be upheld." Yet Mr. Duff Cooper's discourse was no insidious effort to involve America. He made it clear we took up the beastly business forced on us in order to preserve our own liberty and that of suppressed nations (which the U.S.A. knew already). The U.S.A. doesn't want propaganda from us. It is sick of propaganda from its own Government and distrusts it, as all wise men do, and all free men do. It bears out what I preach and preach. The neutrals aren't nit-wits. They are all to-day, especially those farther from the guns, in a far better posture than we are to think calmly and to add up correctly a total of blue beans.

**THE OLD MEN AND THE YOUNG.**—An ocean of ink was poured out between 1919 and 1925 to prove that the late Great War, 1914–18, was brought about by the bungling and incompetence of the elderly. It was the justification for the revolt of youth and the charter of the crusade of youth to build a saner world. The reactions of that revolt were world wide. It altered the foundations of society and shattered a thousand rooted traditions and habits of thought and action. No

one denies that. Does anybody deny that the present great war was brought about by the will (bungling, if you like) of the young, the organisation of youth which had revolted from the bad old traditions and standards of eld? It is incontestable, if you hold the common view that the war was brought about by the Nazis. And isn't it a stimulating reflection? For it leads us to ask whether, when it is over, once more the pendulum will swing back, and once more age will have its turn. The "counsel of the old men" was proved (to the satisfaction of the young) a disaster by the war of 1914-18. That of the young men will be proved no less disastrous after this war. Are the elder statesmen then to come back to their own? Or shall we try the regiment of women? Or apes? Or do we look higher and dream more optimistically of government by angels?

**PARTY CAPITAL.**—Let us carry the idea a little farther—into the field of politics. Will any political party be justified in claiming that the sorry scheme of things which brought us to war in 1939 was brought about by the bungling policies of a rival political theory? We have heard that the tragedy was the tragedy of capitalism. Was Russia's aggression against Poland and Finland and other small states the aggression of capitalism? Or, if Stalin's brigandage is to be excused as a germ caught from Hitlerism (German measles), was Nazi aggression a tragedy of capitalism? In a word, what capital can any form of Socialism make out of the tragedy of 1939? The only conclusion that emerges from the present tragedy of civilisation is a vindication of Democracy. Democratic government, in whatever form, and whether carried on under the banner of Socialism, Liberalism or Conservatism, has been clearly shown as standing in the main for peace, for settlement of disputes by arbitration, for honouring the pledged word and the rules of humanity, for freedom and justice. We shall never put this world right by re-shuffling party cards. Our reforms must be broader based, on morals not on party politics. It is the Christian party, not the Liberal, the Socialist, the Conservative, which must triumph at the first post-war elections all the world over. The new governments must come in on the Christian "coupon."

**THE SON OF A FAMOUS ENTERTAINER MARRIES A CHARMING BRIDE AT ST. STEPHEN'S, GLOUCESTER ROAD**

Mr. Anthony Pelissier, Royal Engineers, son of Miss Fay Compton, the actress, was married last week to Miss Penelope Dudley Ward, elder daughter of Mr. W. Dudley Ward and the Marquesa de Casa Maury. The bride, who was given away by Mr. Charles Birkin, wore a white satin gown, her tulle veil being surmounted by a pearl cap

**THE DAUGHTER OF AN ADMIRAL MARRIES A MAJOR AT CHELSEA OLD CHURCH**

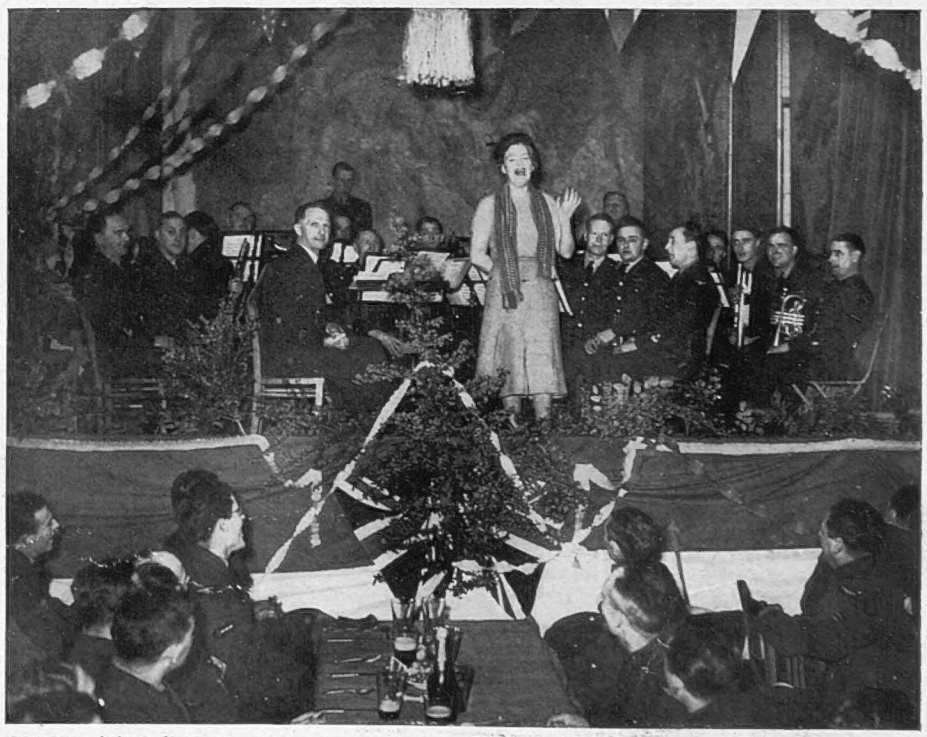
Miss Joan Madden, second daughter of the late Admiral of the Fleet Sir Charles Madden, was married to Major H. M. Vere Nicol at Chelsea Old Church last week. The bride wore a gown of ivory velvet, with a real flower headdress

**G.P.O.**—After Christmas the G.P.O. heaves a sigh of relief and accepts our grateful thanks. It deserves them more than ever in this year of grace. Many of its best men and trained men have gone to fight or to serve the fighters, and its marriage with the transport services is no longer the ideal union it was. Its difficulties are great, but when war broke out, expected difficulties—which have not yet materialised—were infinitely greater. Many of the G.P.O.'s admirers were a little disappointed by the greatness of the change from perfect efficiency to haphazard during the first four months of war. At first the posts were maintained and, through no fault of the G.P.O., the morning post was a post in name only. Then deliveries were reduced to one a day, which arrive in country districts after 10 a.m., that is to say, long after workers had left home. As a result, these people see their day's letters twelve hours late. Then, delays have proved terrible. Item: a registered packet took four days to travel between Petersfield and Windsor. No explanation was ever offered. Item: a registered packet was seven days in transit between London and Winchester. An ordinary letter often five days between Chiddingfold (Surrey) and Rogate (Sussex). The strain on the village P.O.s has been immense; G.P.O. difficulties very great. But the results of war reorganisation have injured the great reputation of this fine service before the major confusion anticipated has come about.

**APROPOS G.P.O.—FOOLS.**—The Bishop of Manchester voiced the feeling of many when he circularised to his diocese an appeal to the Government to stop "pools" betting. He said what so many of us say continuously: It is *incredible* that a Government should with one voice exhort us to save and lend to the nation and at the same time suffer the diversion of £40,000,000 a year of earnings into the pockets of a few shrewd promoters. How to account for this illogicality and rotten weakness? In an ideal democracy the nation votes into power an administration charged with the duty of *governing* on a broad mandate without fear or favour. We have a hundred instances that in recent years its decisions have been guided by fear of its own people's reactions to firmness, that it has often compromised with the right and the strong policy lest it antagonise a section of the voters. There is no more glaring example of this criticism than in the weak policy of the Government in regard to the evil of pools betting. Incidentally, the present inefficiency of the Post Office services would be reduced if the evil were put down, as it should be, on much more important grounds.

**ETON RETRENCHES!**—Eton's efforts to meet the coming economic blizzard are contained in a circular, dated December 19, addressed to parents. It must be admitted that many parents, who realise that unless school fees are *somehow* cut by 30 per cent. they cannot keep their boys at Eton, read the circular with unmixed feelings of amazement. Surely, surely, this little sop is not the whole Reform and Retrenchment Pie. Item: orders on the sock shop are prohibited till further notice. Item: a boy should not have more than £4 pocket money per half. Item: the school dress can be bought ready made in London instead of from the Eton tailors. Item: dark blue overcoats may be worn instead of black. Item: steps are being taken to discourage the giving of leaving presents to masters. The headmaster admits that these economies do not involve a large sum, and in that conclusion many parents agree. They invite him to try again, with an axe, not with a pair of nail scissors.

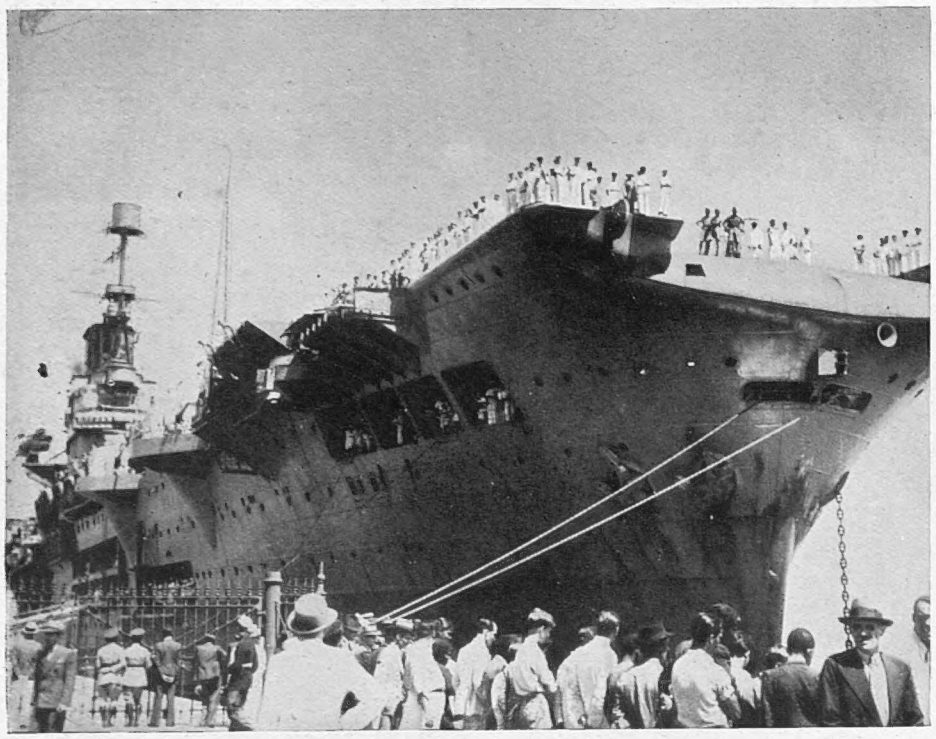
THE OLD STAGER



**GRACIE FIELDS SINGING TO THE R.A.F. IN FRANCE AND TO TENS OF THOUSANDS OF LISTENERS IN GREAT BRITAIN**

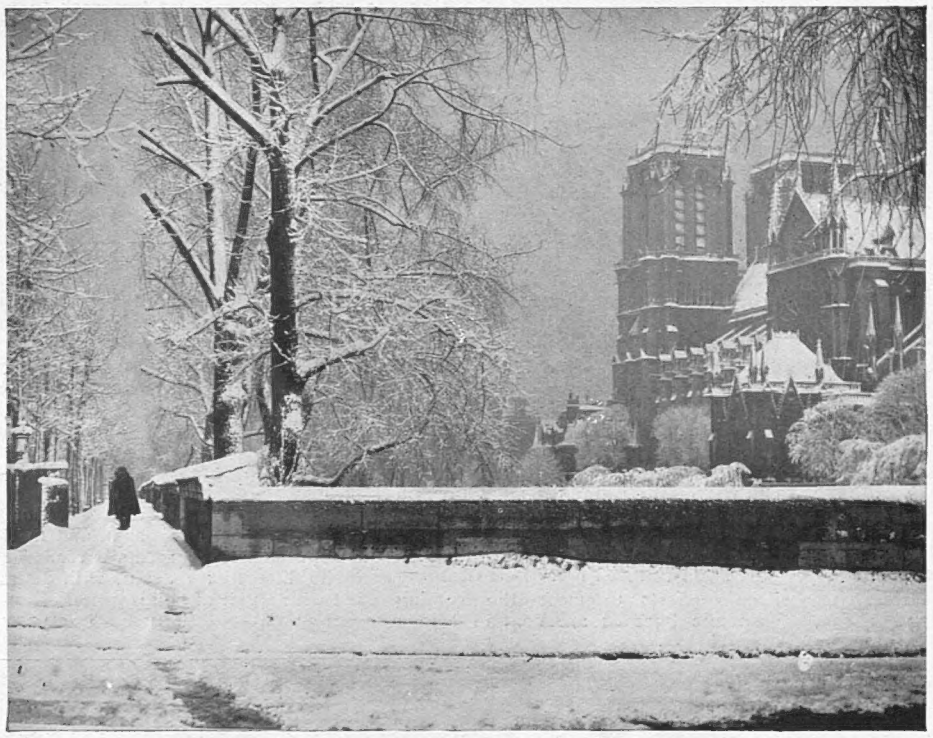
Thunderous roars of applause rang out in the R.A.F. messroom and across the ether to listeners in the home country. Gracie was in great form, changing adroitly from humorous ditties to classical songs with special emotional appeal at this time of the year. Her concert went with a bang!

# NEWS FROM ALL QUARTERS



**"WHERE IS THE 'ARK ROYAL'?" WELL, A FEW DAYS AGO SHE WAS DOWN AT RIO**

The famous question of the Goebbels propaganda, "Where is the *Ark Royal*?" has echoed round the world. We must apologise for not keeping the German authorities promptly informed, but here is an answer which helps to minimise our neglect. The crew and the giant carrier are both visible over the heads of Rio de Janeirans in a picture taken on December 17



**THE EUROPEAN SNOW WAVE HAS EXTENDED FROM END TO END OF THE CONTINENT**

Paris experienced her share of the snowfall, and the scene in the vicinity of Notre Dame was beautiful indeed. Rome and other big cities usually associated with sunny days have also been clothed in white

**THE EVACUATED LORRAINERS RECEIVE NEWS OF THEIR NATIVE LAND**

When at Chovigny (Vienne province) the post arrives with copies of *La Libre Lorraine* there is a rush for the newspaper and friends gather round to hear the news from the evacuated territory which lies too near the Rhine for safety

# THE BRILLIANT FINNISH

**THE FINNISH COMMANDER OF THE PETSAMO DISTRICT, GENERAL WALLENIUS, VISITS THE CENTRAL AREA OF FIGHTING**

He is here seen talking to a captured Russian soldier with a Finnish officer standing in the background. A number of the pictures we have received from this area of winter darkness are taken by flashlight

**FUR-CAPPED FOREIGN JOURNALISTS INTERVIEW A RUSSIAN PRISONER IN THE FOREST AREA**

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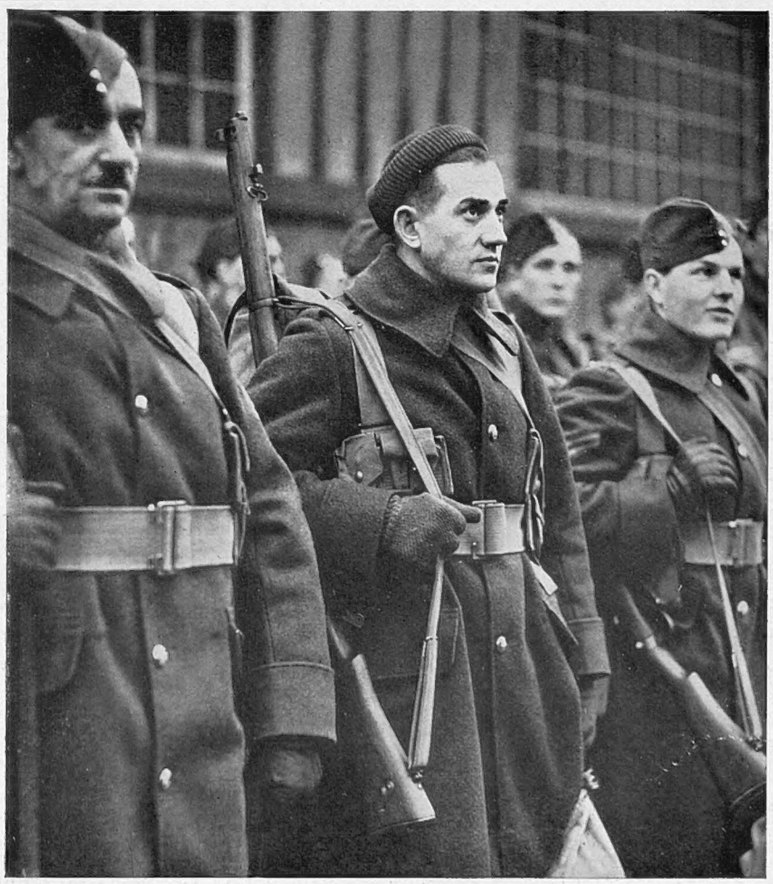
# MORE CANADIANS ARRIVE

**ANOTHER CONTINGENT OF CANADIAN TROOPS ARRIVING IN BRITAIN LAST WEEK-END**

The scene at the quayside as a crowded transport disembarked its portion of the latest Canadian contingent to arrive in this country. The French Navy had assisted in their safe arrival



**WELL-CLAD, ARMED, AND ACCOUTRED WERE THESE CANADIAN ARRIVALS**

The men of this new contingent were a particularly good-looking set — "a fine body of men, Sir," was the military comment

**A CANADIAN SERGEANT OF HEARTY PROPORTIONS WRITES TO HIS RELATIONS**

Seated in the comfortable writing room of the King George and Queen Elizabeth Overseas Club in Malet Street was Sergeant —— when our camera-man visited the club

# WHAT DOES 1940 HOLD IN STORE FOR US?

*Up to the Present We Have Neither Undertaken Nor Undergone Any Large-scale Attack by Land, Sea or Air. What of the Future?*

*(The Strategy of the War—XV.)* By GENERAL SIR CHARLES HARINGTON, G.C.B., G.B.E., D.S.O., D.C.L.

A LOT has happened since my last article. First and foremost we have got over Christmas and into the New Year. Whilst wishing that all would enjoy it (and especially those who had been granted leave from our Services) I was anxious lest the Man of Mentality should choose Christmas or New Year's Day, with a full moon, to revel in his well-known wickedness. That he did not, we must be thankful. His accomplice had other ideas. He chose Christmas Day and Boxing Day to make life in Helsinki and other places in Finland as horrible as he possibly could.

I try very hard when writing these articles to survey the situation quite calmly from both sides. I know only too well the vast task which we are up against. The German nation does not pack up. It never has and it never will; and they can endure privation to the bitter end. We are going to have our successful weeks and our set-back weeks.

The last has been a very successful week. We have much to be thankful for. Our hearts have been thrilled by the gallant feat of H.M.S. *Ursula*, and by our splendid airmen in their great air battle against tremendous odds. In the last few days the first contingent from Australia has arrived. They will soon be busy with their seaplanes, as the Germans will know to their cost. And since I wrote last, my old friends the Canadians have come, and how silently they arrived. A very good piece of work, and a surprise to all of us outside official circles. It was a great joy to me to send them a wire of welcome. I was the first Chief of Staff to the Canadian Corps when it was formed in the Ypres salient during the last war, under Lieutenant-General Sir Edwin Alderson, and afterwards under Sir Julian (later Lord) Byng.

The present commander, Major-General McNaughton, has kindly asked me to go and visit his contingent in the New Year, which I shall certainly do. They are grand fellows and I have kept in touch with them ever since the last war.

It is a joy to all of us to know that the Army is concentrated "somewhere" and holds a portion of the great Maginot Line; from all accounts the B.E.F. is in excellent form and ready for whatever may happen. All this delay, though no doubt boring, has been worth everything. Those of us who remember the start of the last war fully realise this, and as M. Daladier reminded us, the French at this stage in the last war had suffered 450,000 casualties, all killed; and we had also suffered great losses.

The perfect understanding between the French and British, which becomes more clear each day, not only as regards their services but also as regards supply and financial matters, must furnish another severe shock. This is a real asset and one which was wanting in the last war, at any rate until the later stages.

Those who listened to the broadcast by the Finnish Minister in London on Boxing Day will realise the brutal attack which has been made on that country and will applaud the heroic defence which has been put up by 4,000,000 against 182,000,000. All honour to the Finns. Their historic defence is writing world's history each hour, and they have surely earned the help and support of all. The Russian has never proved himself a good fighter outside his own country, but in the present encounter he appears to be still lowering his record. Snow, ice and frozen lakes are nasty obstacles, especially when the defender knows how to use them to the best advantage.

The Russian has tried to penetrate from the north. He has tried to cut Finland in half. He has tried to advance from the Karelian Peninsula, and he has tried to make ground from the south. At the moment he has failed everywhere. No doubt he is sending for more help, and the reinforcements have probably no idea of what is before them or where they are being sent. Ice and snow are very important factors and deterrents. The Finns on their own have won the admiration of all, and with the help which is being hurried to them from all sides, will be more than ever determined to withstand the devilish attacks which are being launched against them.

What is the problem if both Hitler and Stalin are held up? These are the two people who were going to dominate the world. It looks more clear each day that the world has no intention of being dominated. What then happens? It does not appear likely that they are going to beat the Allies at sea. It does not, on present form, look as if they are going to beat us in the air. Do we, therefore, come back to two problems?—the army, and the economic and blockade problem. With regard to the latter, the scales seem to be inclining daily towards our side. The enemy merchant ships are now nearly off the seas. The blockade is tightening daily. Only one side should win in that struggle, but it will be long, and we come, therefore, to the Army.

The German Army is pinned down now behind the Siegfried Line and opposite the Holland and Belgium frontiers. Is it going to sit there till the spring, and then get up and attack the Allies? One only hopes that it will, but I doubt it. Will it get up and go somewhere else? One thing is sure and that is that it cannot do that unobserved, and wherever that "somewhere" is, it may find some other human obstacles in the way. This Finland business is by no means over. The Russians are, as I write, ordering up more reinforcements, but at the same time the neutrals and others, including the Allies, are all out to help the Finns in various ways, and we read of volunteers from Sweden, from Canada, and elsewhere all rushing to help them in their struggle.

Now we hear of Indian troops having arrived in France. What an Empire we belong to. It appears that our King has only to press a button and every part of his Empire responds at once. This must make Hitler think. The *Graf Spee* incident must also make him think. From all accounts he lost a lot of prestige over that. It must have been humiliating even for him and his thick skin, after broadcasting his success over our cruisers, to have to admit that his pocket battleship was driven limping into port, and that by his own order she could do no better than limp out again and scuttle herself, almost in the fairway. Anything rather than fight. A very poor end and absolutely opposed to the traditions of the German navy or any other navy.

There was something very wonderful on Christmas Day, when our Dominions and Colonies expressed their devotion and loyalty to His Majesty in turn, and when he made that wonderful speech ending with those never to be forgotten words.

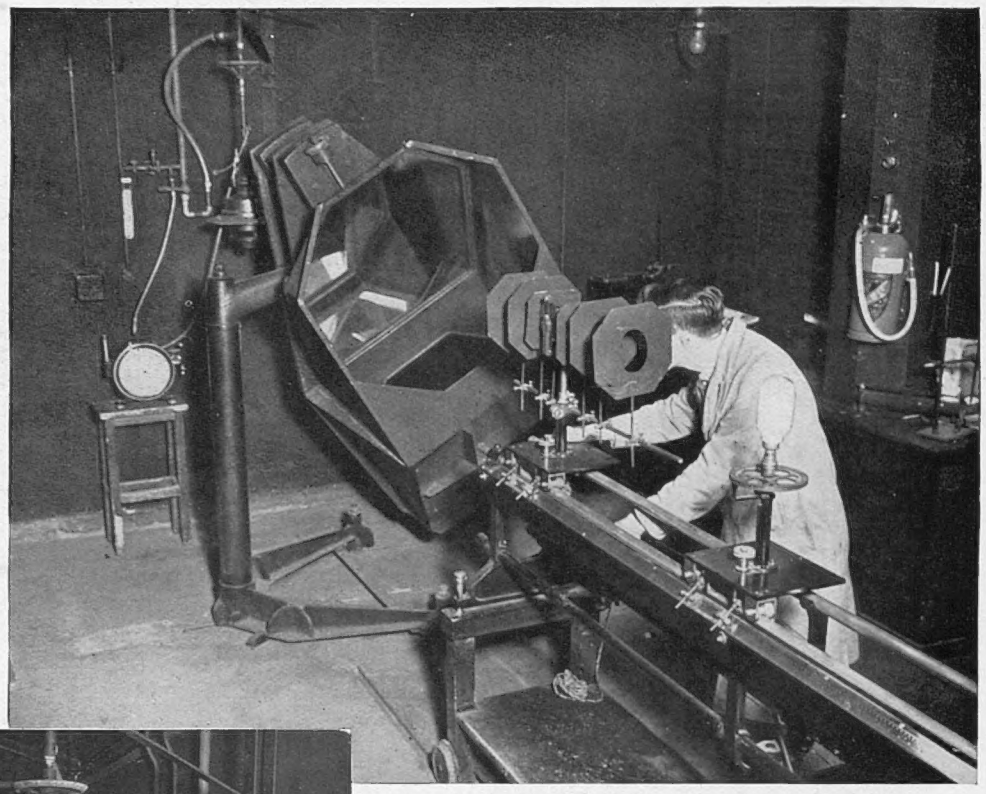
Yes, that is the true answer. Let us go out into the darkness and find the Hand of God. That is the solution. There is no other. The thing for each one of us at the moment, whatever our nation, whatever our colour, whatever our religion, is to find the Hand of God in the darkness and to grip it firmly. Only through that grip will light and sunshine appear and through that light and that sunshine the new world, a world of peace and truth, will arise, in which nations will be able to live in peace, happiness, and security. It is a big ideal, but I do not think we should for a moment despair of its attainment.

Now that Christmas is happily past and without incident, and we have entered into a new year, I have a feeling that we have got to settle down and bring this business to a head. Hitler and Stalin have both talked a lot. We have called their bluff. Stalin has got the shock of his life in Finland, and Hitler has got nowhere except against a very big wall. Whether by sea, land, air, economic or production, he cannot find much to log up on the asset side. He has, however, a great nation behind him which will stand a lot. They understand hardships and will endure them, and for a very long time. We have a long way to go before there is a hope of them believing a shadow of the true situation.

Let us, therefore, all start the new year with the determination that this evil has to be conquered. That in future the world has to be made up of nations which can live their own lives in peace and without fear of aggression from their neighbours. That nations must live within their own limits. That the days of domination are over. That each nation must live within itself as it wishes to live, but that over and above all the man who speaks for the sincerity of a nation must be a man whose word can be trusted by the other nations.

As I write, our sympathies go out to the Turkish nation in their tragedy. When I was in Constantinople I visited Samsun, and put in at many of the little villages along the coast. It is terrible to think of that scene in Anatolia. The thousands of those wretched people in the open, with a temperature 20 or 30 degs. below zero and a blizzard raging. Huddled together hoping for charcoal dropped from aeroplanes. The first relief train has got through to Erzincan. My friend of my Turkish days, then General Ismet Pasha, now President Inönü, has gone to the scene. Help is being sent from this country and from many others. All that is humanly possible will be done, but it is just appalling to think of the scene in those towns and villages in northern Anatolia to-day.

And so this momentous year opens for us all. Would that we could know what it will bring forth. So many things may happen. There may be vast attacks by sea, land, and air. Indiscriminate bombing of undefended cities, as we expected four months ago, may take place; on the other hand, they may not. Reason and even humanity may prevail, and the war may resolve itself into one of economic blockade. In any case we have the greatest asset of all and a great advantage over the Germans, in that we have a nation truly united and truly determined to face whatever awaits us, and to face it hand in hand with our Allies, the great French nation.



**THE NEW "STARLIGHTS"**

One of the new street lighting units, which have already made their appearance in the West End of London, being photometred by a gas industry research worker, or in other words, having the intensity of its light measured to conform exactly with the regulations

**MEASURING BY MECHANICAL EYE**

Because accurate calculations in the street are impossible, this device is used and every fitting has to be passed in a laboratory. The operator must be in the darkened room for at least twenty minutes before he can make proper measurements

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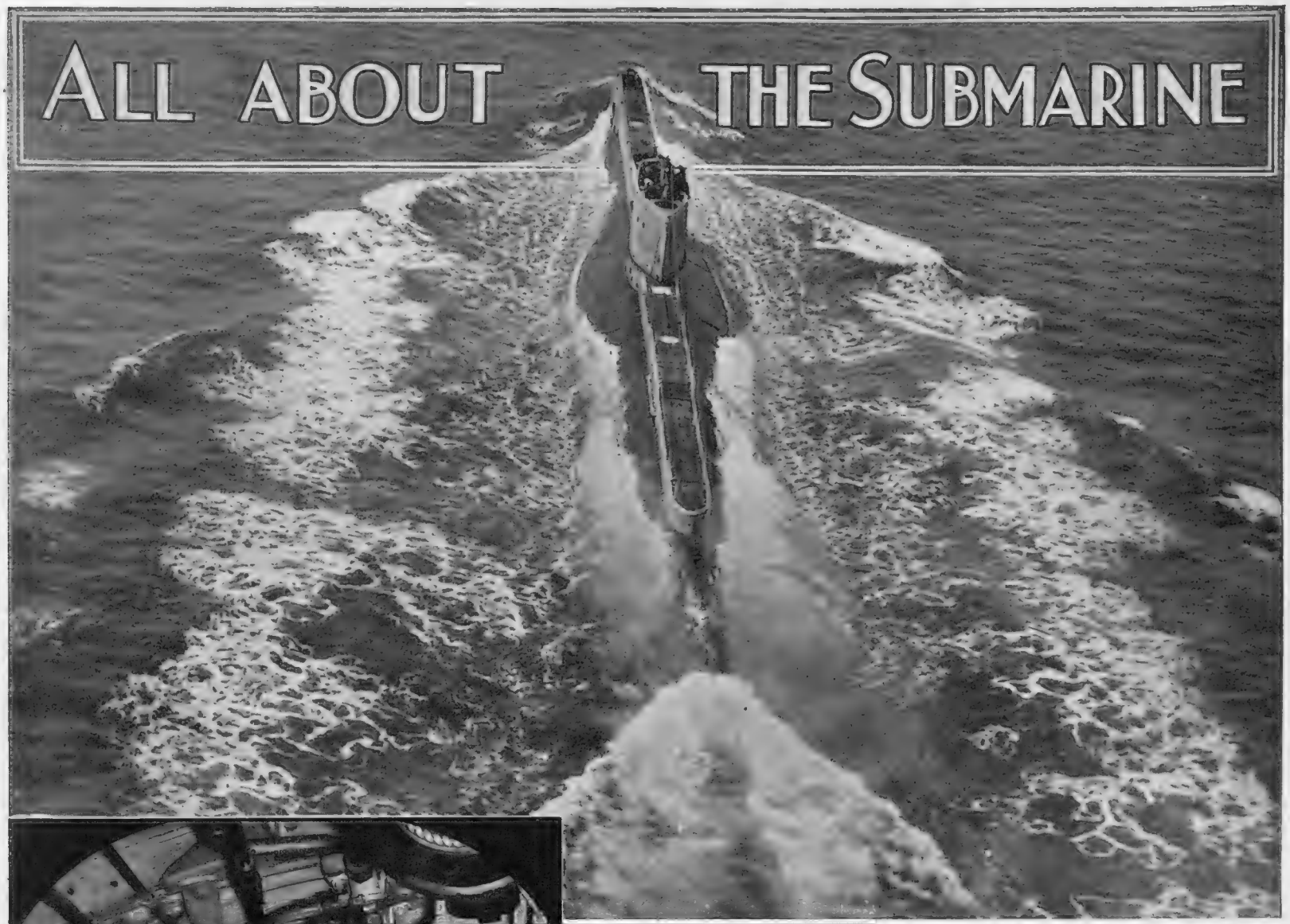
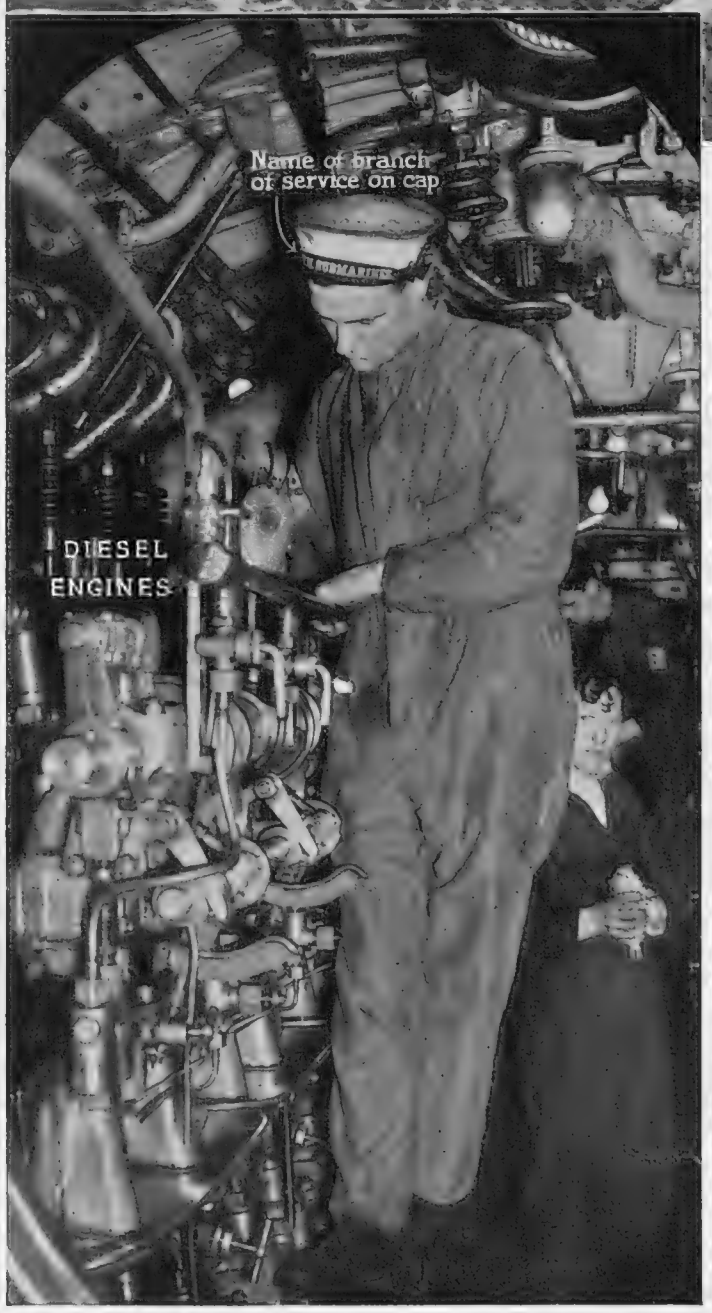
*The Editor begs to remind his readers that the date for the closing of the "Christmas Pictorial Competition" is approaching. The first, second, and third prizes are, respectively, £5, £3 and £2. The Competition will be found on page 55 of the Christmas Number. Portions of a landscape have to be cut and arranged in their proper positions.*

# ALL ABOUT THE SUBMARINE






**AT WORK BELOW**

The Diesel engines require constant care. They are placed on both sides of the central alleyway of the submarine

**THE SUBMARINE COMES TO THE SURFACE FOR FRESH AIR AND TO RECHARGE HER BATTERIES**

Just when and where a submarine can indulge in a surface run depends very much on circumstances. She must come to the surface for recharging her batteries and might have to re-submerge if an enemy plane were seen

**AT PLAY**

The extraordinary limitations of space on a submarine are indicated in this picture of some of the crew engaged in a game of cards. The four players actually lean on the smooth sides of torpedoes as a back rest. A gramophone discourses music from one of the padded seats

b

*Drawn by R. B. Way*

**THE UNDERSEA DANGERS WHICH LIE IN WAIT FOR AN ADVENTUROUS SUBMARINE**

Directly a submarine sets out to push its way to some enemy point of vital importance, it will encounter nests of mines laid so as to lure it to destruction. Many a German submarine came to grief in the huge mine wall laid by Britain and the U.S.A. between Norway and North Scotland

**A SUBMARINE SURFACING IN A FAIRLY CALM SEA AND YET CREATING A LARGE AMOUNT OF TELL-TALE FOAM**

This submarine, here taken as an example of a British type, is none other than the *Salmon*, to whose recent exploits the First Lord referred in his latest broadcast. Her forward periscope is raised —as is her wireless pole, used for messages when on the surface

# ALL ABOUT THE SUB

1. ***What is a Submarine and what Purposes Does it Serve?***

A submarine is a vessel which can, at will, submerge itself below the surface of the water and navigate either in such a condition or on the surface. The ability of submarines to conceal themselves beneath the water gives them obvious advantages over surface torpedo-carrying vessels, notably that of being able to deliver a surprise attack in the day time. On the other hand, their very slow speed and limited field of vision when they are submerged are serious handicaps, especially when they are operating against high speed ships whose movements cannot be accurately predicted.

The use of submarines as a weapon of blockade against the enemy's mercantile marine (though almost impossible if submarines are to comply with the requirements of international law) is a development of its original functions, and has been fostered by increases in tonnage and technical improvements which have extended the radius of action and the sea-keeping capability of the submarine. These developments have also rendered the submarine a most valuable reconnaissance vessel for the secret observation of enemy warships from and to their bases.

One other function, which was tentatively developed on a small scale by the Germans in the war of 1914–18, is that of breaking a blockade by carrying cargoes from and to the blockaded country. Owing to the small carrying-capacity which it is practicable to have, this function is unlikely to become developed except in connection with goods of great and essential value.

2. ***How Big is a Submarine?***

Although there is no reason why submarines should not be built as large as any surface-ship, practical considerations and the nature of their functions have hitherto limited, and seem likely always to limit, them to a moderate size. Their size is determined primarily by the sea-keeping capability and radius of action which it is desired that they should have, but is influenced also by any special functions, such as minelaying, which they may be intended to perform. "Submarine Cruisers," of the type of the X1 in the British Navy or of the *Surcouf* in the French Navy, have displacements of the order of 3,000 tons on the surface and 4,000 tons submerged, but such vessels are rare, a more common displacement for ocean-going submarines being about 2,000 tons on the surface and about 2,500 tons submerged, which is only slightly larger than that of a modern destroyer. Smaller submarines are constructed for service at lesser distances from their base, but it seems possible that technical improvements now enable even the small German submarines of 250 tons displacement on the surface, which were generally believed to be useful only for coast defence, to have very wide radius of action.

3. ***How is a Submarine Propelled, and at what Speed can it go?***

The propelling machinery of submarines is usually an internal-combustion engine of the Diesel type, which is both economical and compact. Steam turbines have been used, for instance in the British K class submarines, in order to give a greater surface speed, but have obvious disadvantages when used in a crowded and comparatively ill-ventilated space on board a ship which must be able to submerge rapidly at short notice. When submerged, a submarine is usually propelled by electric motors run off storage batteries, which are charged up periodically by the main engines when the vessel is on the surface. Limitations of space available for the storage batteries (which are bulky as well as heavy) severely limit the speed at which a submarine can travel when submerged and the distance which she can cover in that condition without recharging. In an unconfirmed report before the war, it is reported that the Germans have effected very great economy of space, and have thereby substantially increased the radius of action and the speed of their submarines, by using turbine propelling machinery for all purposes. The same turbines are used always, being driven by steam when the submarine is on the surface, and by compressed air when she is submerged, the compressed air being stored in tanks, which can be recharged by the main engines when the vessel is on the surface. It is possible that such a system would achieve the results which are desired, since it does away with one set of machinery (the electric motors) entirely and replaces the storage batteries by compressed air tanks, which can be less bulky and less weighty, but it would impose great hardship on the personnel owing to the great heat which would be shut up within the submarine when she submerges in haste.

Large submarines can usually do 17 or 18 knots on the surface (though in exceptional types speeds of as much as 24 knots can be attained) and smaller ones can do from 13 to 15 knots. When submerged, greater size no longer permits of higher speeds, and most submarines can do only 9 or 10 knots; it is possible, however, when a high submerged speed is especially desired, as in the British R class (no longer in existence), which were built for action against enemy submarines, to sacrifice other items to that end and to provide for speeds of as much as 15 knots under the surface.

4. ***What is the Armament of a Submarine?***

The main armament of a submarine is, of course, her torpedo tubes and her torpedoes. She has usually six or eight, but sometimes even more, torpedo tubes, in each of which there is a torpedo. Where space permits, one or more spare torpedoes are carried for each tube. It is obvious, however, that if due allowance is made for torpedoes missing their target, a submarine which goes out on a cruise of several weeks would soon become impotent, unless she were sparing in her use of her main armament. It is usual, therefore, to provide the submarine with at least one gun, of a small calibre, say 4-in. or 5-in., to enforce her orders to merchant shipping, whenever circumstances allow her to operate with impunity on the surface; the ammunition used in compelling the ship to stop and to allow herself to be boarded and sunk by an explosive charge, or even in sinking her by gunfire, occupies less space than the torpedo, which is thus saved for more important service.

# MARINE: Questions Everyone is Asking —and the Answers

Some submarines are fitted for laying mines, the mines being accommodated in special tubes or shoots, from which they can be released when the submarine is submerged. The number of mines which can be laid by a "submarine minelayer" is very small, but their effectiveness is increased as a result of the secrecy with which they can be laid. Submarines of the "cruiser" type can also be fitted to carry a seaplane, with the aid of which their effectiveness, whether for commerce destruction or for reconnaissance, can be very greatly increased.

5. ***How can Submarines Communicate with their Bases, with Other Ships and with Each Other?***

A submarine *on the surface* can, of course, use any or all of the visual or sound signalling devices which are used by other vessels at sea, viz. flags, semaphore, signalling lantern, or hooter. They can also use wireless-telegraphy in the same manner as any surface vessel for short- or long-distance communication. *When submerged*, however, the receipt of signals made by flags, semaphore, or signalling lantern becomes very problematical, while their dispatch by any of these methods is, of course, impossible. Sound-signalling, however, is very much more effective through the water than through the air, and is used for detecting enemy submarines. Wireless communication with submerged submarines has not yet been perfected and presents certain difficulties, which seem unlikely to be overcome, owing to the screening effect of water.

6. ***How does a Submarine See when it is Submerged?***

If the submarine is completely submerged, it becomes completely blind and can navigate only with the aid of its gyro-compass. It is provided, however, with one, or more usually two telescopic periscopes, which can be rotated at will, and which enable the captain to see round the entire horizon. The field of vision of these periscopes is, however, somewhat limited, and the distance of their "horizon" is very short, especially when, as is usual in order to avoid detection, they project only a short distance above the surface of the water.

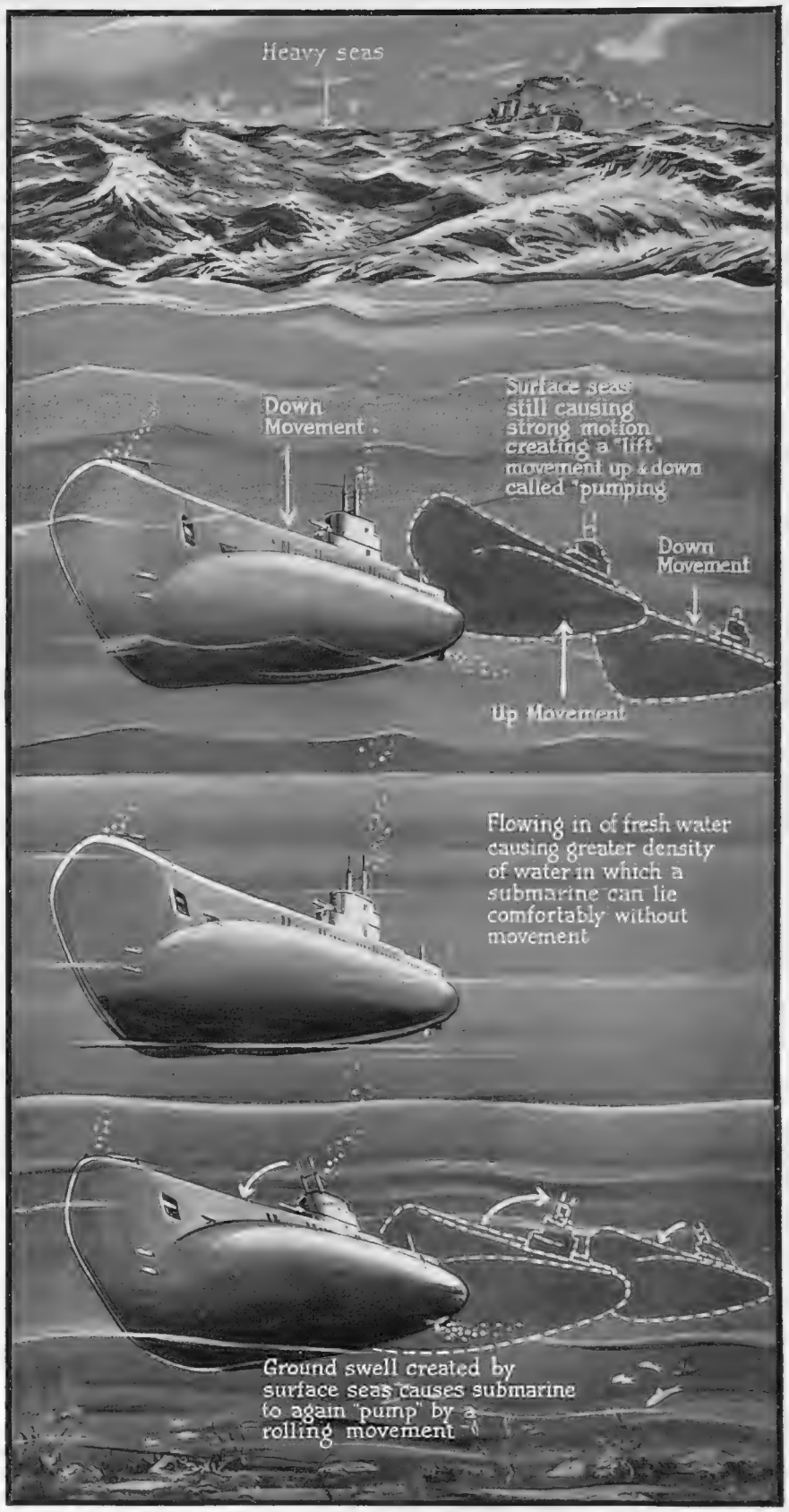
7. ***When does a Submarine Travel on the Surface and when Submerged?***

Broadly speaking, it may be said that a submarine travels on the surface except when it is essential that her presence should not be known. When she leaves her base she will often do so submerged, in order that she may avoid attack by any blockading submarine and that her departure may not be observed and reported. Once in the open sea, unless she has reason to suspect the presence of enemy vessels or aircraft, she will surface and continue her voyage on the surface, thus economising both in time and in fuel, in preparation for the demands which will be made on her while she is in her operating zone. While on the surface a very careful look-out must be kept for enemy ships and, more especially, enemy aircraft, as not only may these attack and destroy the submarine, but they may, if they do not achieve her destruction, frustrate her in the mission on which she is engaged. If the zone in which she operates is one which is well patrolled by the enemy, the submarine will probably have to remain submerged during daylight hours, moving about as necessary, or perhaps almost stationary in some favourable position, with only her periscopes showing above the surface of the water.

Only after nightfall can she dare to come to the surface, in order to give her crew some fresh air and to re-charge her storage-batteries, run down by prolonged use during the day. In the event of bad weather, she will try to do this in some deserted and unobserved cove, where she can anchor in safety, for otherwise she must constantly be prepared to dive immediately at short notice to avoid being run down and sunk. It must, of course, be understood that, no matter how serious her plight, no submarine commander would ever dream of anchoring off a hostile coast. When attacking the enemy, she must obviously observe through her periscopes, but it is usually wise, as soon as the torpedo has been fired, to submerge completely and proceed as fast as possible to some spot far distant from where the tell-tale track of the torpedo begins; only later will it be safe to raise the periscopes cautiously again and see what has been the result of the attack.

*On right—*
**Weather conditions are constantly affecting submarines in all kinds of ways, making it very difficult for the crew to obtain their proper rest**

To remain on the surface may be to invite injuries as well as exhaustion from the constant need to cling to something solid in a whirling, bucketing world. To dive at periscope depth may be to invite collision because vision is limited to the top of the next wave. Moreover, as each big wave passes over her, a submarine diving near the surface in heavy weather will behave like an express lift which rushes up and down without ceasing. This motion is called "pumping" and it may continue for 30 or 40 ft., which soon proves too much for even the most hardened sailors. But a solution can be found in certain fortunate places. "At a depth of 90 ft.," writes Commander Kenneth Edwards in his *We Dive at Dawn*, "we found peace. There was no motion at all on the submarine although the depth-gauge needles showed the height of the great waves over our heads. If we came up 10 ft. nearer the surface, the submarine began to 'pump' again; if we went deeper, she began to roll in the ground swell. There was just that narrow layer of calm water between the ground swell and the effects of the great gale."



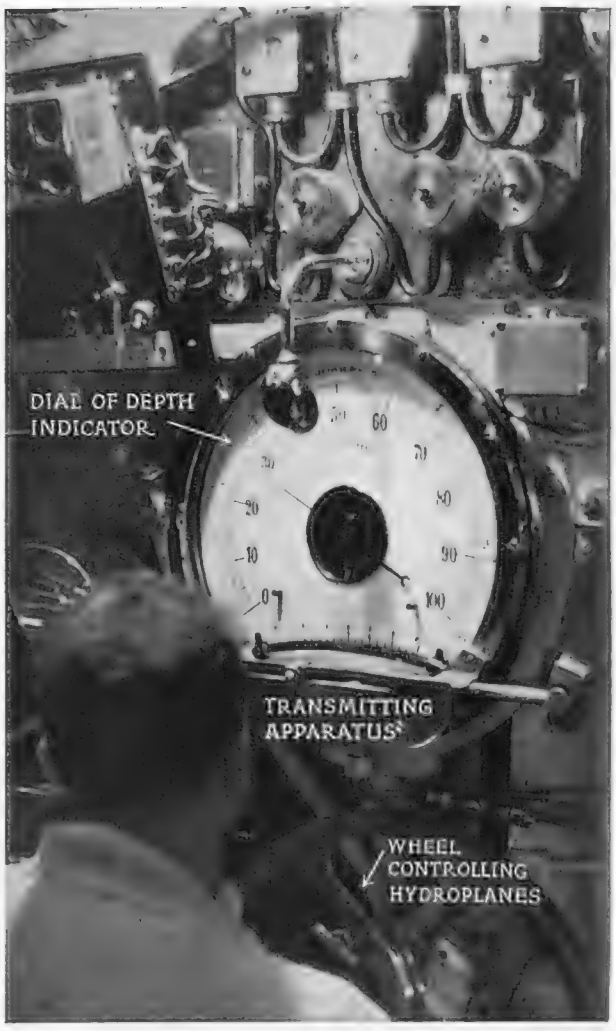
**A USEFUL TYPE OF BRITISH SUBMARINE—THE "LONDON"**

Gun and conning-tower have domed shields in order to give a streamlining which will increase underwater speed. She is carrying her wireless mast in the surface position in order to be able to communicate with vessels of the Fleet

# TENSE MOMENTS UNDER SEA in a British Submarine

**WATCHING AN ENEMY VESSEL THROUGH THE PERISCOPE LENS, SHOWING THE HANDLES FOR MOVING THE PERISCOPE TUBE**

Vision through the periscope is often very limited. The splash of waves may wash over the upper lenses, much interfering with vision. The viewing lenses can be turned to any point of the compass by the handles shown here




**WATCHING THE DEPTH INDICATOR DIAL AS THE SUBMARINE SUBMERGES**

This big clock-faced dial is watched with tense interest when a submarine submerges. The hydroplanes should bring her to a desired depth when way is on the vessel

**SUBMERGING—A PROCESS DURING WHICH EVERYONE IS ON THE ALERT TO CARRY OUT HIS DUTIES**

An enemy vessel has been sighted and it is desirable to get below the surface. The periscope is still just above the horizon, but it may be necessary to go deeper still. When the upper periscope lenses are submerged, the submarine is blind—she must find her way by compass and dead reckoning

# GERMANY'S "INVISIBLE STRANGLER"

## *A Visit to the Headquarters of the Ministry of Economic Warfare—that Most Potent Weapon of Modern Warfare*

By NOEL THOMPSON

HOW many Londoners could say off-hand where Houghton Street, W.C.2, is? Even my taxi driver confessed himself puzzled. In fact, it is a narrow street through which very little traffic normally passes, turning off Aldwych, just beyond Kingsway. Yet since September 1, this humble street has become one of great importance, for on either side of its rather murky length runs the London School of Economics, now the headquarters of the Ministry of Economic Warfare.

I found it refreshing to be told that the Ministry has no intention of being known as a sort of fifth column, or fourth attacking force, but takes its place with the fighting forces as an equally potent weapon of modern warfare.

To mix metaphors, the Ministry comes out into the open as the "invisible strangler" of Germany, and has no objection to the use of that name until a better or more pithy one can be discovered.

Its job is threefold strangulation. First, to prevent any contraband reaching Germany either direct or through neutrals, thus breaking down their import system. Secondly, to prevent Germany exporting to other countries and thereby obtaining very much needed foreign currency or credit. And thirdly by out-bidding or undercutting Germany in any markets in which she may be interested.

Consider Germany and England as two rival multiple stores. A fight is going on between them, with England the richer and better equipped in business brains, as she certainly is in this particular battle.

Germany wants to sell off 100,000 men's shirts. Right, says England, we will sell just as good shirts at about half the price. Which store do the customers patronise? Germany wants to buy electric light bulbs to light her store, and hears of a consignment on the market. She makes a tender, only to find that England has made a better offer at a higher price.

So Germany gets a neutral store to order supplies for her, and hopes to sneak them home. But the neutral store has already acquired her year's supply and England is suspicious. As the goods pass her shop-front they are quietly arrested by her vigilant naval guards, and an inquiry is held as to whether the goods are contraband or harmless; whether for internal consumption or to be passed on to the enemy.

That is a crude simile, but it will suffice to clarify some extremely subtle garrotting, which is driving Germany so wild that from blackmailing neutrals to indiscriminate murder on the high seas was a simple step.

Let us take a typical week of the Contraband Control a, week which averages out the enormous seizures of the early weeks of the war, and the rather smaller ones nowadays, when German ships are few and far between, and neutrals have realised that genuine trade pays them, but trade with our enemy does not.

The Allied Contraband Control has intercepted and detained nearly 900,000 tons of contraband. The main figures of a week's work look like this: 4,500 tons iron pyrites, 1,750 tons hides and skins, 1,200 tons of coffee, 2,800 tons of other foodstuffs, 850 tons of timber, 500 tons of cotton, 400 tons of petroleum products, 250 tons of chemicals. That is the British list.

The French weigh in with their figures for a fortnight: 18,000 tons of foodstuffs, 12,650 tons of metals and ores, 2,230 tons of textiles, 253 tons of resin, 220 tons of fats, 273 tons of chemicals, with tons of oilseeds, turpentine, cork, jute, silk, rubber and other goods.

I repeat, those are not exceptional figures. Imagine every few days Germany realising that she has lost for good that amount of vital necessities.

Putting the matter in a simpler form again, our captures of petrol would fill every motor car and lorry tank in this country; the hides would make over 5,000,000 pairs of army boots; the jute would make 46,000,000 sandbags; the cotton would have made sufficient gun-cotton for 10,000,000 howitzer shells, and the total captures would cover 600 miles of railway track, or a distance from Hamburg to Vienna.

What is the procedure of this Contraband Control? England has three search ports, Kirkwall, in the Shetlands, for the northern routes, the Downs (off Ramsgate), and Weymouth. In addition, abroad there are Gibraltar, Malta, Haifa and Aden. France, whose navy is working and co-operating marvellously, has Marseilles, Dunkirk, Le Havre, and Oran, in Algiers.

To any of these ports, whichever is most convenient, the ships may be taken for search of cargo. The ships' manifests have to be examined to find out the consignor and consignee of the goods. It is a tricky question, naturally involving delay, because enormous and intricate research may be needed, but nowadays the delays are down to a minimum.

For instance, early in the war, large amounts of grain were going to Antwerp, the natural port for Germany, aboard Belgian vessels. The quantity was suspicious, but as soon as the Belgian Government stated that it was entirely for internal consumption the ships were immediately released.

Nowadays, matters have been speeded up, so that if shipowners collaborate delay is slight. Ships' manifests are sent in advance by air mail, and then it is only necessary for the control officers to check the cargo with the manifests when the ships arrive later.

All the control ports are in direct communication with the Ministry in Houghton Street by means of teleprinter. Manifests and papers can be sent straight over the wire to the head office, where every day, for twelve hours a day, Sundays included, the Contraband Committee, under its chairman, Lord Finlay, is sitting to settle the problems. Chairman of the Enemy Exports Committee is Lord Justice du Parcq. His problems have only recently begun.

Here it would be wise to explain briefly the history of the Ministry. "Invisible Strangler No. 1," or the Minister of Economic Warfare (equivalent to the Minister of Blockade in the last war), is Mr. Ronald Cross. He has yet to make his statement in Parliament—I believe the secret session removed his proposed opportunity. He will report probably as soon as Parliament meets.

With him is the Treasury expert, Sir Frederick Keith-Ross. For two years before it started work picked men in the Civil Service and from the City had been earmarked for the Ministry and were able to take up their work at a few hours' notice.

The Ministry has no financial vote in Parliament and cannot directly spend money. But with the Board of Trade, the Board of Overseas Trade, the Ministry of Supply, and the Ministry of Food providing the means, the Ministry of Economic Warfare supplies the "brains" and information.

For instance, the German market in the Balkans is ripe for capture. The Board of Overseas Trade and the Ministry of Economic Warfare co-operate to do this. To speed up and simplify trade a system of what are really commercial passports, called "Navicerts," has been introduced.

A shipper can declare to a British embassy or consulate the origin and destination of a cargo, and obtain a "Navicert" to show on arrival at one of the contraband ports. It is then only a question of checking the cargo. This was started first at Washington, but recently the system has been extended to Buenos Aires, Montevideo, and Rio de Janeiro.

For the opposite process, exporting goods of possible German origin, neutrals can obtain in advance, by making a declaration, a Certificate of Origin.

But despite these methods, and assistance such as allowing vessels to leave possible contraband at a control port until its fate is decided, to be called for later if it is released, or promises permitting them to return with it, there must be some little delay. But how much better than the German method of interfering with trade by indiscriminate sinking? And the neutrals, despite German pressure, realise this.

I wish it were possible to reveal further details of this battle of wits which the Ministry of Economic Warfare is winning. I felt I should like to be working in it, foiling Germany's every attempt to import and export.

Imagine the rage of the Germans when, say, they hear that 10,000 tons of copper is on the market in Yugoslavia. (I am using a purely hypothetical case.) She can afford to pay so much for the urgently needed material. Britain pays more and not only gets the copper but robs Germany of it at the same time. Or when 5,000 tons of bacon are for sale, and the Ministry of Economic Warfare lets the Ministry of Food know, and they snap it up out of Germany's hungry jaws.

Alternatively, when Germany is offering a nice bargain in exports, and Britain slips in with a better bargain and clinches (and pinches) the deal. For the ears of the Ministry are all over the world, and the arm long and quick to take action on the information received.

But these are stories which must not be told, for fear of involving neutral states, or revealing methods, and so the greater part of the work goes on shrouded in secrecy. But we have no need to worry that it does go on, and when the time comes for history to be written it will be found that pounds and francs, translated into golden bullets of a score of different currencies, have completed the slow strangulation of blockade. And Mr. Ronald Cross and Mr. Winston Churchill will have a quiet celebratory dinner together.

**THE CONTRABAND COMMITTEE IN SESSION**

A special picture taken at the Ministry of Economic Warfare. At the end of the table, seated in the centre, is the Right Hon. Viscount Finlay and on his immediate left is Mr. Justice Morton, Deputy Chairman. The other members of the committee are representatives of the French Mission, the Admiralty, Foreign Office, Board of Trade, and the Ministry of Shipping

# BRITISH FIGHTING ME

**ONE OF THE HELIGOLAND RAIDERS OF DECEMBER 18 IN HIS BOMBING KIT**

One of a crew which took part in the Heligoland engagement on December 18 in which twelve Messerschmitt planes were brought down. Owing to the wintry weather the men went up especially well clad

**PROTAGONISTS IN THE BIGGEST BATTLE YET FOUGHT IN THE HISTORY OF AIR WARFARE**

The machines and the men both appear in this picture which shows the actual personnel of the R.A.F. which manned the Wellington bombers when they took on a cloud of Messerschmitt fighters and fought what has been described as the biggest air combat in the history of aerial warfare. Seven planes unfortunately did not return, so hot and determined was the opposition of the German defence

**ONE OF THE FIGHTERS OF THE SEA WHO HAS SCORED HITS AGAINST THE ENEMY**

Lieut.-Commander G. C. Phillips, of the *Ursula*, lands after his vessel's daring raid on a German naval stronghold at the mouth of the River Elbe on December 14, when she sank a cruiser of the Koln class. The cruiser was screened by six German destroyers. Not only did the *Ursula* have to dare Nazi naval forces, but she had to overcome big minefields and dangerous shoals

**BEARDED OR CLEAN-SHAVEN, THE TEMPER IS THE SAME**

The commander and crew of the submarine *Ursula* are seen crowded together on the narrow deck before landing at their home port

# N WHO HAVE SCORED HITS AGAINST THE ENEMY

SIGHTED THE "BREMEN," SANK A U-BOAT AND HIT TWO CRUISERS

Lieut.-Commander E. O. B. Bickford, of the submarine *Salmon*, on a subsequent visit to London

SERGT. PILOT G. H. PHILLIPS, AWARDED THE CROIX DE GUERRE

Flying over the line with his petrol tank pierced by anti-aircraft fire, he avoided a French village at great risk and landed by parachute

MEN WHO WERE IN THE HELIGOLAND AIR BATTLE OF DECEMBER 18

The air arm is one branch of His Majesty's forces which is hotly and persistently engaged in fighting the enemy. The biggest engagement yet was the fight between the Wellington bombers, "wing tip to wing tip," against specially powerful Messerschmitts, who appeared determined to stop our visits to Heligoland waters. They lost heavily in the attempt

A GERMAN SUBMARINE CAUGHT ON THE SURFACE BY A NIGHT PATROL

Drawn for
"The Sphere"
by
Montague Dawson

*The necessity for a submarine to surface in the ordinary course of its work is an ever-present pre-occupation of a commander. If a vessel has suffered some damage, the operation of surfacing may become obligatory. The U-boat, in this case, has been discovered by a prowling destroyer, and the enemy craft is lit by the brilliant ray of the destroyer's searchlight. The submarine surrenders, but the incident may not be at once published. It is possible that the particular U-boat has been carrying out work in a pre-arranged German scheme, and it is advantageous to let the enemy think that the U-boat is still engaged in this task. At a certain date she will not return, and the German Submarine Command will have to add another loss to the already high toll*

# HOW THE GHOST TROOPS

WELL EQUIPPED TO MEET THE NIPPING TEMPERATURES OF THE NORTH

This Finnish soldier is admirably clad in reindeer coat and shoes. Only fur will keep out the arctic cold of north Finland

A RESULT OF THE PERSISTENT AIR RAIDS ON HELSINKI. THE SPATTERED FRONTAGE OF A BLOCK OF RESIDENTIAL FLATS

The bomb exploded at the point marked by the cross and splinters flew upwards and penetrated several windows, injuring many inhabitants. Civil servants, physicians and students are among those who had flats here

GUNS ARE CAMOUFLAGED AS WELL AS TROOPS

A group of Finnish soldiers around a gun which is camouflaged in the same way as the men. *Below*—A twin-engined Russian bomber brought down by the Finns

A RAID-DAMAGED CAR IN A HELSINKI STREET

The women are members of the Women's Volunteer Corps. *Below*—A glimpse of a snow-covered village street near the front

## A TABLOID SUMMARY OF THE METHODS EMPLOYED BY THE FINNISH ARMY IN THE FROZEN NORTH.

THE gallant resistance put up by Finland has aroused the admiration of the whole world outside certain limited areas. It was realised that if hard winter conditions came in time Finland would have several natural aids in her fight for independence. But the extent to which she has made preparation to take advantage of these conditions has come as a surprise to all who were not intimately aware of the special training courses through which the Finnish Army had to pass. The Finnish Command has, in addition to the development of a sound strategy, evidently been practising a number of clever tactical devices, which are now being put to excellent use in the shadowy forests of northern Finland. Here are some of them :—

To take advantage of the snow the Finnish troops in the north are all working on skis. A long narrow type of ski is used with a simple broad leather loop into which the boot is thrust—no strappings are used—the skier slips rapidly out of his skis to shoot and as rapidly assumes his skis. A 6-mile pace can be kept up for hours, and 10 miles in emergency.

To avoid leaving a tell-tale trail the skiers are keeping within the shadow of the forests, and it is from these regions that they have been persistently attacking the Russian invaders. A variety of devices have been employed in order to stem the forward movement of the Russian masses. The employment of white overalls and hoods has made the Finns almost invisible during their persistent sniping of advancing columns. If a detached group is discovered in an awkward situation, it "freezes" where it stands. This Indian-like practice has been taught to the young Finnish soldier.

# OF FINLAND FIGHT: Pictures in and Around the Fighting Areas Where Winter Conditions Are Aiding the Finnish Defence

CAMOUFLAGED IN WHITE FOR THE SNOW FIGHTING IN THE NORTH

Finnish troops are specially clothed in white. They have white overalls and hoods and when on the march on skis can cover six miles per hour for long periods and over ten miles in emergency

The two or three hours of daylight have so limited the period for possible attack during a given day that the Finns have evolved a searchlight force to which only the bravest and most accomplished men are admitted. They carry on their chest dry-battery electric projectors, sufficiently powerful to send a long ray in the direction of a body of Russian troops. The enemy are dazzled by the sudden light, and under cover of the surrounding trees advancing Finnish sharpshooters carrying a special type of sub-machine-gun pour in as much fire as possible during the limited time.

The enemy are ill-clothed and ill-fed. They have not the proper boots for such a campaign. They are therefore in grave danger of being frost-bitten. The Finns have taken advantage of this by building large fires of fir logs which are found by the Russians apparently deserted. But they are soon disillusioned. The sharpshooters pour in a devastating fire from pre-arranged cover.

When silent work is required the Finnish skiers can glide noiselessly upon an enemy and use the Finnish dirk with telling effect. The Finn is also equipped with a new armour-piercing gun, the latest armament devices having been carefully studied. Thus they combine the swiftness of the ski with the output of modern armament factories.

An example of this occurred recently when two Finnish soldiers, laden with hand-grenades, destroyed several planes on a new Russian airfield, and slipped away in the darkness and rejoined their comrades. It is this persistent, individual attack of the expert which appears to have broken the strength of the Russian advance.

A SOVIET BOMBER COMES DOWN IN A SNOW-COVERED FIELD

Large numbers of Russian planes have been brought down by the small but very efficient fighting force of the Finns. The planes bear the Russian five-pointed star on the fuselage. *Below*—A Finnish anti-tank gun's crew camouflaged in their white overalls and hoods

# FINLAND—LAND OF FAIRY TALES AND GRIM REALITY

## Where Men and Women Are Trained to Concert Pitch to Serve the Interests of Their Country

By HARRY J. GREENWALL

WE become so accustomed to asserting that "the women were wonderful" that when war breaks out in unusual places the tribute to the women of the particular land wracked by war is liable to be lacking in intensity, and heaven knows everything one can say about the women of Finland is true. It is only a few months ago that in these very columns I was writing about the Baltic scene, describing the fear of the Swastika which haunted these once happy lands with their backgrounds of the fairy-tale teller Hans Andersen; lands of fine sturdy people, with simple tastes, but with grim purpose; lands of vast silences, of enormous pine forests and lakes as big as the legendary lakes of Canada. Herds of reindeer which seem to have come right out of the pages of our childhood's books. But perhaps nothing lingers longer in the memory than the mental picture of the Finnish women going about their daily jobs.

I sailed out of Hull for Helsinki in a Finnish ship. Never shall I forget the strange sight which I saw when I went on deck the first morning at sea. The captain and the senior officers were men. The crew—women!

MEMBERS OF THE LOTTA SVARD ORGANISATION. There are 85,000 active members of this group which is named after the heroine of the Finnish War of Independence of 1917. Their activities are many and varied and are now all directed towards the interests of the home front

It might have been early morning in any hotel rather than aboard ship in the North Sea. Women were scrubbing the decks; women, like muscular housemaids, were polishing the brasswork. The "stewards" were women.

In the early hours of the second morning at sea I was peacefully sleeping, and the porthole wide open, strictly against orders. A big Baltic wave came right in and nearly drowned me. I must have set up a yell, because in a few moments the stewardess came in and addressed me a few well-chosen words in what was undoubtedly the Finnish I did not understand. In a flash she had stripped me of my sea-soaked pyjamas, and for an agonising moment I feared she was going to smack me, but she merely hiked a fresh pair of pyjamas out of my bag, flung them at me, and then with the air of a cross Nanny, although I dare swear she was my junior by fifteen years, she shooed me into an empty cabin, returning to the other, ankle deep in water, and setting it to rights before returning to her bunk. Yet bright and early she was up again with my pre-breakfast cup of tea.

It was through Ingeborg, the stewardess, I first heard of the Lottas, the group to which she belonged. The Lottas of Finland are named after Lotta Svard, heroine of the Finnish War of Independence of twenty-two years ago. There are 85,000 active members of the group, and in a land where the total population is less than half that of Greater London, and which is standing up to a country with a total population numbering more than four times that of the United Kingdom, it is easy to guess that such a group of sturdy women mean the release for front fighting purposes of quite a number of men.

The two toughest races I know in Europe are the Finns and the Hungarians; wise men who have studied these things will prove to you that the two races are closely related and, still more, their languages belong to the same group. The whole world is admiring the fight the Finns are making, but those people who have had the good fortune to get a first-hand knowledge of the country will better appreciate the bitterness of the struggle. Helsinki is no "small country capital"; it is a fine modern city, with wide boulevards and grand buildings. The bitter fighting is taking place at a temperature below freezing point; daylight this time of year is limited to a little more than two hours. Even in the summer the evenings are chilly, but summer is lovely. Close to Helsinki harbour is an immense market of fruit and flowers; heaped up piles of white and red raspberries; strawberries, currants, black and red, and ripe yellow gooseberries. Everything very cheap. Not in Helsinki, but in many little summer resorts along the coast one can live well for about 5s. a day.

Farther north the scene changes; there is little Russian or Swedish spoken, although Swedish is the "second" official language of Finland. Finnish only is spoken by the seldom-speaking peasants busy around their wooden huts. Roads are few. When winter comes the jingling sleighs rush over the frozen ground, and the herders of the droves of reindeer clip through the icy *tundra* for moss to feed their charges.

Against this background of fairy-tale scenery the Lottas work and train, for their ranks are filled by women in all stations of life: at this very moment, women who in the ordinary way would be packing their trunks to pass the winter months in the south of France or Egypt are wearing grey uniforms and defending their country against the same foe their parents had to fight twenty-two years ago, but as far as I am concerned, I would rather have a Finn as a friend than as a foe.

Helsinki at the moment has a black-out which is even blacker than London's. Anybody whose work may keep them late in the streets of the Finnish capital will find themselves stopped every 200 yards or so by the flashing of an electric torch. The torches are carried by the grey-uniformed Lottas. Sturdy female hands tap energetically on windows from which a glimmer of light comes; hands equally strong and business-like verify the locks and shutters of the closed shops, and if you have lost your way, a Lotta will guide you home.

During the daylight hours the uniformed women guard public buildings, drive military lorries, unload trains, and sometimes act as firemen in the not infrequent fires which occur in small towns and villages entirely constructed of wood. Many Lottas have been wounded by enemy action. One had her right leg shot away but continued to carry on driving an ambulance until she fainted from loss of blood.

A number of women in grey uniforms are acting as motor-cycle units, maintaining contact between fighting groups where the battle is hottest, where the Russians are trying to cut Finland in twain. These Lottas think nothing of going full speed through the hail of machine-gun fire. Yet it is not as a fighting force that the disciples of Lotta Svard are trained. The active force which carries out the duties I have briefly described are girls between the ages of eighteen and forty who have undergone six months' training. This is the active force numbering 85,000.

Behind this mobile force, if I may so describe it, is another force numbering some 25,000, consisting of girls under eighteen years of age. They are trained, young as they are, as nurses. They have nine months' hard training before spending a fixed period in a hospital.

The third contingent consists of 16,000 women of over forty, all of whom have a certain social and financial standing in the country. This contingent of Lottas rank as "protecting members," and their real service is in organising charity fetes, concerts and exhibitions which have for their object the increasing of the fund which supports the Lottas, although this fund is not only subsidised by the Government but it also receives quite generous individual donations.

A great number of the Finnish Lottas belong to the class known to be in easy circumstances, but their devotion to the cause of their country is no less than that of the class which for generations has been used to hard work. It is necessary, because of reported incidents during the last few weeks of Russian women taking an active part in the fighting, to stress the fact that the Lottas, although wearing a uniform which is the same for all three contingents I have described, are not a women's battalion, nor is there any likelihood of them at any time becoming a fighting unit, although I would not say they are incapable of fighting.

A friend of mine who asked a woman motor-cyclist who had been under fire whether she was frightened, received this reply, "Only in the first five minutes." On the other hand, the report that a Russian airwoman, eventually shot down, had flown low over the streets and had machine-gunned women and children, only met with the reaction of the greatest horror.

The Finns are a strange mixture. Their representative at Geneva, my old friend Dr. Holsti, himself looks like an overgrown gnome, who might be taking a holiday from a Hans Andersen story; he has that ripe sense of humour which I assume all self-respecting gnomes and mannikins possess. I have met his like in Helsinki; professors and doctors of philosophy, men who are ready to pun in Latin or pick up a rifle and go out in the snow and shoot down an enemy. Yet the real weapon of the Finn is not a rifle; it is a very bloodthirsty 6-in. long dagger, which hundreds of thousands of Finns carry about with them, *open*.

The Finn is a gentle soul, as a rule, but get his blood up and he will be after you with his knife before you can pronounce that very word. That is why the Finns in their white cloaks and hoods are giving the Russians a bad time. Give a Finn a knife (he'll probably have his own, anyway) and a pair of skis and he is a match for the most highly trained soldier in the world, on his own ground, *bien entendu*. The Russian soldier is not to the ski born, but a Finn is as at home on a pair of skis as is a jockey on a horse; why, he just has to use them every day during those long, long winters.

The Finn will use his rifle, because the men from the countryside are keen sighted and good shots at fast-moving snow birds, but when the Russians are close enough, the Finn whips out his knife, holds it between his teeth, and is then after his enemy like a whippet after a rabbit, and the odds are as much on the Finn as they are on the whippet.

Anyone who has seen the Finns manœuvring on skis will understand the skill and the speed of these lithe men with keen-edged knives, and to those who have not I would say: think of a Canadian ice hockey team, and then multiply the speed by three.

It is not my intention to-day to discuss politics, or speculate on what might have been if the Baltic countries had a year or two ago agreed to pool their resources and offer a united front of seven nations to the foe. I know well enough it is but a step from Leningrad to the Finnish frontier, but it took the Russians just twenty-two years to discover the "danger." Those matters belong to another sphere.

I am thinking to-day of the beautiful Hans Andersen country to which war has come; I am remembering the sunny summer days, the gay fruit and flower market of Helsinki, but I can close my eyes and see the snow-capped fir trees, the occasional flight of a white snow bird, and the flashing Finns with knives between their teeth.

# THE MAKING OF A TORPEDO

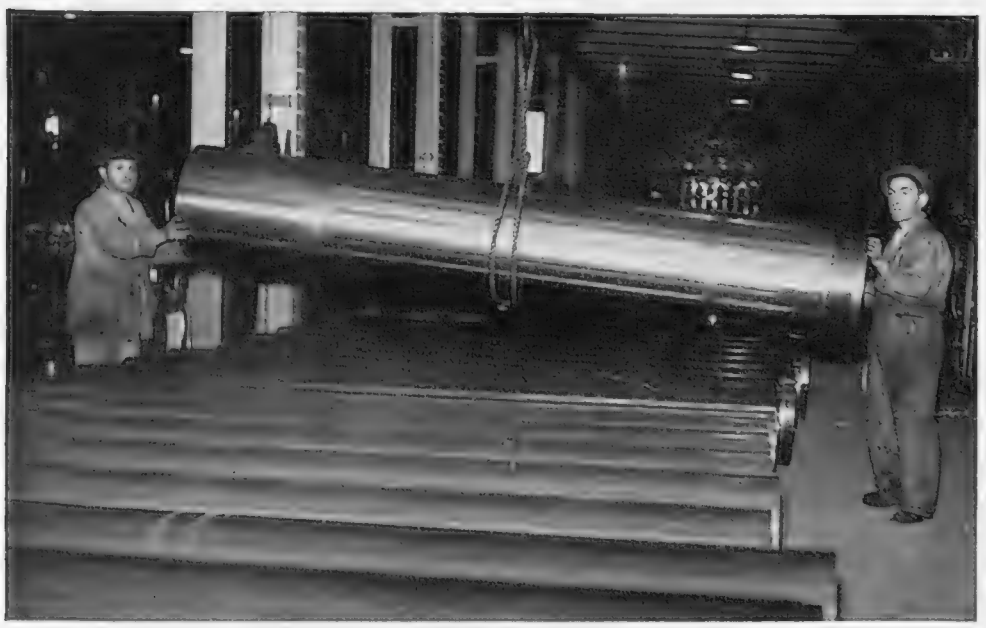
*Six Thousand Separate Parts Go to the Making of One Torpedo —From Start to Finish Its Manufacture Takes Several Months*

**1.** AVENUES OF TORPEDO HEADS BEING ASSEMBLED IN A TORPEDO FACTORY

This series of pictures is planned to show as nearly as possible the parts of a torpedo as seen under construction, starting from the explosive head. (*The series continues on page* 24)

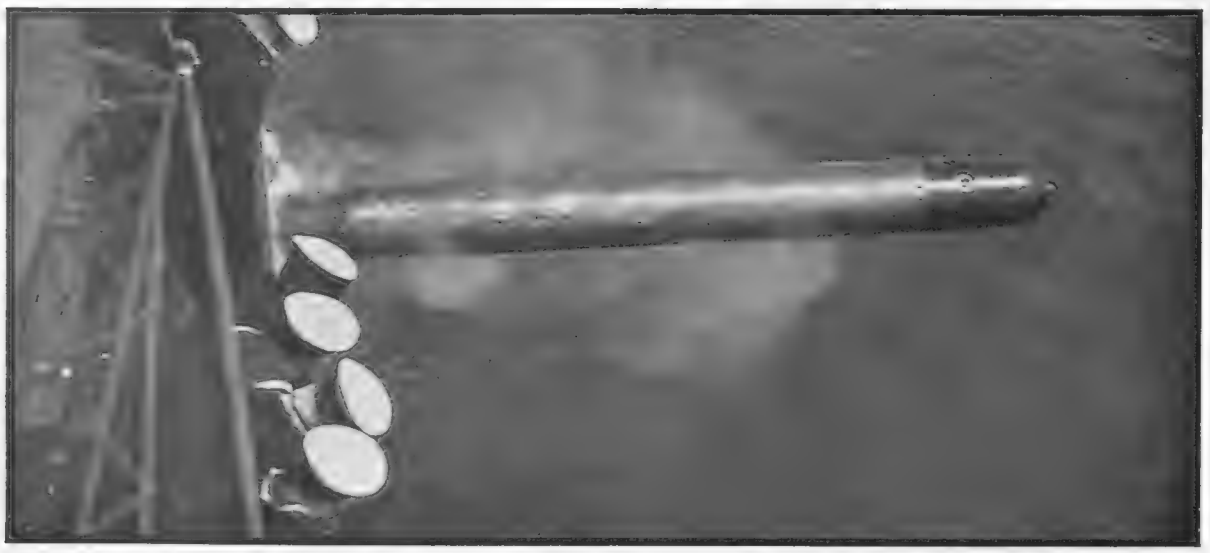
**2.** A NUMBER OF APERTURES HAVE TO BE DRILLED IN THE HEAD IN CONNECTION WITH THE FIXING OF THE EXPLOSIVE CHARGE AND OTHER APPARATUS

**3.** THE HEAD CASING IS CAREFULLY POLISHED BEFORE BEING FITTED TO THE CYLINDRICAL AIR CONTAINER



**4.** THE AIR CONTAINER WHICH PROVIDES THE MOTIVE FORCE WHICH PROPELS A TORPEDO FORWARD TAKES THE FORM OF A PLAIN CYLINDER ON TO WHICH THE HEAD AND TAIL SECTIONS ARE SCREWED

**5.** *On right*—THE REAR TAPERED PART OF A TORPEDO CONTAINS A MATERIAL PORTION OF THE CONTROL MECHANISM. ON THE TIP OF THESE CONES IS PLACED THE DOUBLE-PROPELLER FITTING (*see* diagram on page 23)



*Above*—The head—explosive section of the torpedo—is clearly visible in this instantaneous picture. Behind it comes the long, straight cylinder which contains the compressed air for driving the twin propellers. *Below*—The splash as the torpedo enters a surface wave before it finds its depth by the mechanism shown in the diagram on the right

**A 21-in. torpedo being fired from a nest of four torpedo tubes on board H.M.S. Afridi, one of the most powerful destroyers of the Navy**

WHEN you read that some ship has been torpedoed, if you marvel perhaps at the skill of the man who fired the torpedo, it is ten to one that it never even occurs to you to think how wonderful it was that the torpedo ran true to its mark. It is true, of course, that in order to torpedo a ship the man who fires the torpedo must estimate correctly the course and speed of his target and make the necessary allowance for these in his aim. Once the torpedo has been discharged in the required direction, however, it becomes subjected to various incalculable influences which may tend to deflect it from its goal.

It is necessary, therefore, to provide, within the torpedo, elaborate mechanisms which will automatically correct any conflicting influences—mechanisms which will maintain the torpedo not only on its intended course, but also at its required depth below the surface of the water. Both mechanisms must obviously be extremely delicate in their operation, but the effort required to control a heavy body travelling at high speed through water is very considerable, so their controlling influence is transmitted to the vertical and horizontal rudders respectively through what is called a "Servomotor," which is operated by high-pressure compressed air.

The control of the torpedo in direction is a comparatively simple matter, for the torpedo is, as a rule, discharged in the direction in which it should travel, and if it is not, the necessary adjustment of the controlling instrument is easily effected. This control is exercised by a gyroscope, which is set spinning as the torpedo leaves the tube and is kept spinning until the end of the run. The gyroscope in a torpedo is merely a particularly carefully made spinning-top, very delicately suspended in such a way that, by operating the *vertical* rudders of the torpedo, it automatically corrects any tendency to wander to the right or to the left.

# HOW TORPEDOES ARE CONTROLLED

## Specially Described for "The Sphere" by Lieut.-Commander Edgar P. Young, R.N. (Ret.)

The maintenance of the torpedo at what is called its "depth line"—which is determined, of course, by the nature of the target—is, however, a more difficult operation, firstly because the torpedo can rarely, if ever, be discharged at the exact depth below the surface at which it is intended to run, and secondly because less margin of error can be allowed. If it runs a few feet too deep, it may pass beneath its target, while if it rises too sharply from a wander below its depth line, it may well, owing to its high speed and to the fact that its length is greater than its depth below the surface, reveal its presence prematurely to the enemy. The depth-keeping mechanism of the torpedo is therefore of a more complicated nature than that which has already been described.

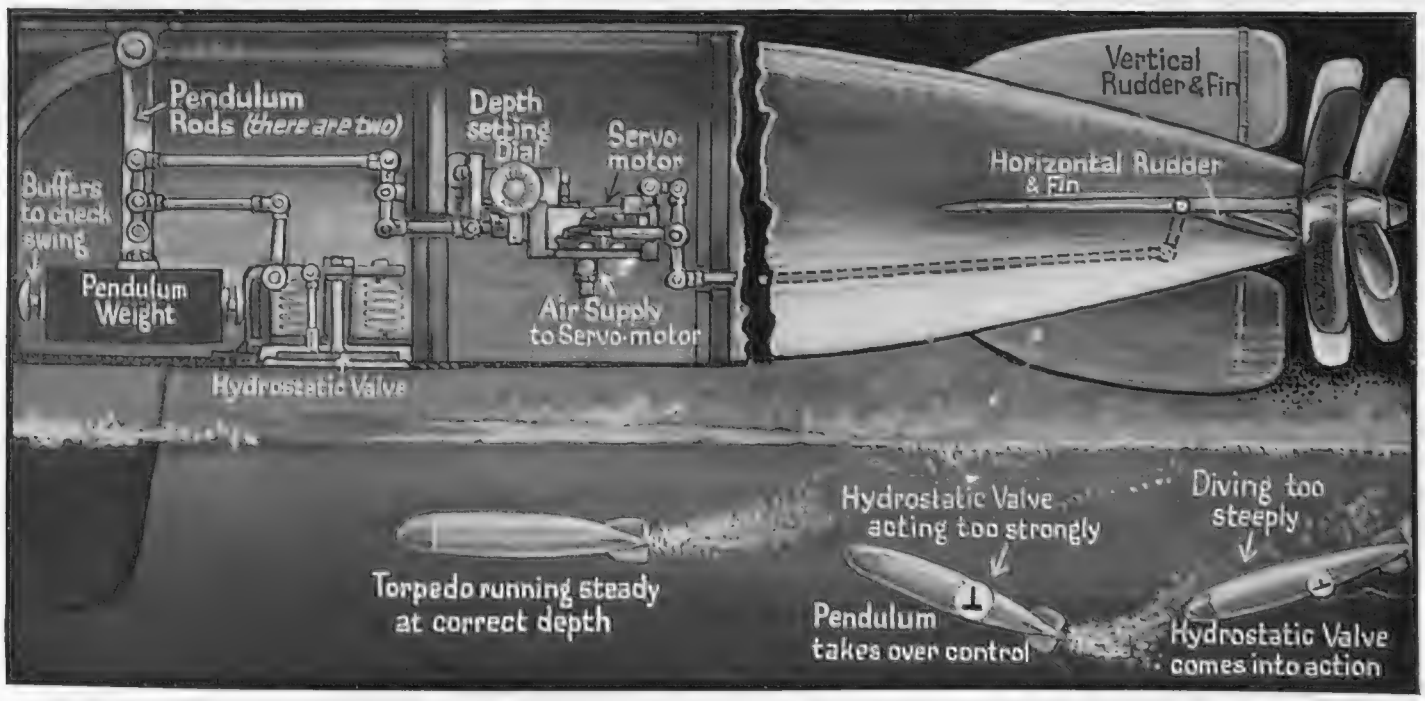
It consists, as is shown in the accompanying diagram, of a hydrostatic valve and a balance weight which act in conjunction with one another. The hydrostatic valve is loaded with a spring which can be adjusted to exert an *outward* pressure corresponding to the *inward* pressure which will be exerted by the water when the torpedo is running at the correct depth. This valve will therefore be in its central position when the torpedo is on the depth line, and the *horizontal* rudders are adjusted to be centralised when this condition is attained. If, however, the torpedo should run *below* the depth line, the pressure of the water increases and overcomes that of the spring, forcing the valve *inwards*, and it is so arranged that in reaction to this motion the torpedo is directed *upwards*. Similarly, if the torpedo should run *above* the depth line, the spring on the valve overcomes the reduced pressure of the water, forcing the valve *outwards*, and the torpedo is directed *downwards*.

It can easily be appreciated that a mechanism of this nature must be so delicate in operation that unless it were somehow damped it would constantly be directing the torpedo upwards or downwards, and the torpedo would constantly be over-shooting the depth line; the result would be that the torpedo would run along like a porpoise, occasionally even leaping out of the water in a similar manner, which would, of course, enable the enemy to see and to avoid it. To correct this tendency there is a balance weight, which operates in such a manner as to tend to keep the torpedo horizontal. This balance weight works in conjunction with the hydrostatic valve, as shown in the diagram, working sometimes with it and sometimes against it, but tending always to damp its effect in such a way that the torpedo does not wander far above or below the depth line, and above all tending to prevent it rising so steeply that it "breaks surface."

Thus science applies the forces of nature in an effort to counteract natural influences which would otherwise make the torpedo run untrue. If the man who fires the torpedo miscalculates the course or speed of the enemy, it will reach the right place at the wrong time—or the wrong place at the right time—while his calculations may be rendered quite false, when the torpedo is already on its way, by the enemy making some change of course or speed. It is difficult to believe that the day will come when science will devise means whereby even these accidents can be automatically compensated by some mechanism, but in the meanwhile the inventors have designed torpedoes which can be steered by wireless or by a man inside. The practical difficulty of making wireless waves overcome the screening effect of a considerable layer of water seems likely, however, to prevent the perfection of the former type, while the latter, calling, as it does, for deliberate suicide, is hardly likely to recommend itself to any nation.

From one tube of these two sets of four on board a British destroyer a torpedo has just been discharged. One of the crew is seated on the little gangway which facilitates movement over the tubes

*On right*—The effect of the first impact with the water and the efforts of the torpedo to find its proper depth




HOW A TORPEDO KEEPS ITS HORIZONTAL POSITION UNDER THE WATER

The depth control mechanism is shown above; the way in which the torpedo behaves is shown below; *see* also notes on right

*On left*—A torpedo, to run well and truly, should not break surface and become a "coughing torpedo"; it should maintain its proper depth. The pendulum weight and the hydrostatic valve control the horizontal planes. The break in the section indicates a space for the gyroscope chamber

**6.** THIS FITTER IS ENGAGED IN PLACING IN POSITION ONE OF THE MANY SMALL PARTS OF THE BALANCE MECHANISM

**8.** PUTTING A FINISHING TOUCH ON THE AIR-MOTOR IN THE TORPEDO'S TAIL

# THE COMPLEX TASK OF BUILDING A TORPEDO

(Continued from page 21)

*The task of building a torpedo is an exceedingly complex one—here we have dealt with a particular part, which serves to give an idea of the whole. Each "tin fish" is, in fact, a self-propelled vessel which, once launched, must continue on its journey unassisted. There are several mechanisms within the torpedo's gleaming hull devised to keep it in the straight and narrow way. There is the gyro chamber, the balance chamber, and the double propeller, all of which contribute to this end. Both the torpedo and the submarine gained their first great impetus in the American War of Independence. Since then both have become weapons of high efficiency and complexity*

**7.** FIXING THE TWIN PROPELLER SECTION OF A TORPEDO IN POSITION: THE PROPELLERS REVOLVE IN OPPOSITE DIRECTIONS AND GIVE THE TORPEDO ITS FORWARD IMPETUS

**9.** NEARING THE END: A MECHANIC ENGAGED ON FUELLING A TESTHEAD AT THE TORPEDO TEST WORKS

**10.** THE END IS REACHED: THE FINISHED TORPEDOES BEING STACKED IN A FRAMEWORK UNTIL THEY ARE REQUIRED BY THE ADMIRALTY. EACH ONE, GLEAMING FROM END TO END, IS FULLY TESTED

# AIRCRAFT AND THEIR PART IN THE "GRAF SPEE" AFFAIR

## With a Note on the Reaction of the R.A.F. to the Women Ferry Pilots Proposal

*The War in the Air, described by* CHARLES G. GREY
(Founder of *The Aeroplane*)

IN spite of the spectacular air fights which the R.A.F. people have had over the North Sea and the Heligoland Bight, one of the most interesting manifestations of air work in war recently has been the part which aircraft obviously played in the destruction of the German pocket battleship *Graf Spee*. A curious feature of the air side of the war so far has been that we have heard so little about the work of the Navy's air branch, known as the Fleet Air Arm. Until early this year the F.A.A. was part of the Royal Air Force, and its people were a species of air marine. To-day it is all pukka R.N.

**THE REAL CLERKS OF THE WEATHER**

One of the most important factors which govern the conduct of the war is the weather. This can curtail land, sea, and air operations for indefinite periods, and advance knowledge of coming weather conditions is, therefore, of importance to all commanders. The study of the weather is part of the job of the Royal Air Force and somewhere in England a meteorological flight carries out observations twice daily. Two pilots perform this important duty and carry out flights up to 25,000 ft. in all kinds of weather. For three years, winter and summer, in rain, fog and snow, not one flight has been missed. The men fly in a special machine with heated cockpit and oxygen apparatus and make observations of the temperature, humidity, ice formation, etc., for the guidance of the Air Ministry meteorological experts. If the weather is exceptionally bad the pilot may find that he has to keep flying, directed by wireless, and land at a station some hundreds of miles away from his take-off. The above picture shows the two "weather clerks"—suitably attired—preparing for an observation flight

All followers of naval affairs know that every ship bigger than a small cruiser carries a catapult, and sometimes two, with an aeroplane lashed all ship-shape and Bristol fashion on to it. How those aeroplanes stand up to wind and weather and how they are maintained within the limited space of a cruiser only the Navy and Air Force know. Incidentally, all the aeroplanes which are built for catapulting are interchangeable with the machines which are standard equipment in the big aircraft-carriers and have to go down the same lifts. The difference is that the catapult machines are all fitted with floats so that they can come down on the water alongside their mother ships and be hoisted inboard by derricks.

The aeroplanes in the aircraft-carriers have wheels like landplanes, so that they can alight on and take off from the flying decks of the carriers. They have what is called arrester gear, a species of hook which in alighting catches in wires which are stretched across the deck of the ship so that the wheels roll over them, but the arrester hook catches in them and brings the machine up "all standing."

Although nothing official has been published about action by aeroplanes in the *Graf Spee* affair, an unofficial message from Montevideo, by way of one of the released British seamen, who had been told by one or more friendly German sailors, suggests that the *Graf Spee* was caught because the seaplanes which she carried on her catapults were damaged by heavy seas and the aeroplane mechanics on board had not had a chance of fettling them up fit for flying again. If the seaplanes had been in flying order they would have been able to report the presence in definite directions of a superior force of British warships—superior in number, although smaller in gun-power.

Another report, also by the way of released sailors, was that while the action was in progress an aeroplane, or possibly more, from one or other of the British ships, said to be the *Exeter*, machine-gunned the decks of the *Graf Spee*, and drove the crews of her minor guns under cover, but just what influence that would have on the action a mere land-lubber cannot say. One hardly imagines that the minor armament could have had much effect on even the smaller British cruisers. On the other hand, if the British squadron had been equipped with enough aeroplanes, or if there had been an aircraft-carrier within a hundred miles or even two hundred miles, a good deal of damage might have been done to the *Graf Spee* by bombing, or by torpedoes from aeroplanes.

The world's navies are still sceptical about the ability of aircraft to sink big ships. But the younger and more enlightened naval officers will admit that a few heavy bombs well-placed may jam the turrets of even a very big ship, or so damage the top-hamper, including her fire control, that the ship may be partly disabled and so become an easy mark for her enemy's guns.

In any case, the probability seems to be that the *Graf Spee* did *not* spot the approach of her enemies because her aeroplanes were out of action, and, equally probably, the *Graf Spee was* spotted by the aeroplanes of the British cruisers. There will be interest in seeing in the future whether any officer of the Fleet Air Arm is mentioned in dispatches, or promoted, or awarded a decoration for spotting the *Graf Spee*, or for the alleged machine-gun attacks.

Also we may assume that the seaplanes from the British cruisers took off before our ships attacked. There would have been very little of them left if they remained on their catapults. And the catapults themselves must have needed a few repairs. Unless the British float-planes were destroyed in the fight, which seems likely, a careful watch must have been kept on the harbour of Montevideo, to spot any movements by the *Graf Spee* and signal them back to the ships before signals could be got through from the shore.

By the way, there is a story of seaplane patrol in the last war which is worth telling here, if the editor can spare room. Commander C. R. Samson, R.N., one of the most popular personages of the Royal Naval Air Service in the 1914–18 war, went out to the Indian Ocean for a while with a tramp steamer which had been converted into a seaplane-carrier, partly to hunt for the German commerce raider *Wolf*, and partly to hunt for German ships or submarines which were laying mines outside the harbours of India.

One of his seaplanes, flown by a youngster named Duncan Smith, was brought down by motor failure in among the Maldive Islands. The machine drifted ashore on a minute islet. Smith and his observer got the motor going again, but the machine could not take off, so they progressed on the water to another island, the natives of which fled into such bush as there was when this strange thing came ashore.

Ultimately they induced the natives to be friends and they were taken in a native dhow to the main island of the group, where they remained for many months before they could get a note taken to the mainland, and a ship could be spared to fetch them and their derelict aeroplane.

By the time their rescuers arrived they had taught the local Sultan and his court and bodyguard to sing the then popular song, "Hello, Hello, Who's Your Lady Friend?" as a national anthem. Kipling made a good short story out of that incident after the war. But even his genius hardly improved upon the letter which Duncan Smith sent home describing the affair.

Now that we are at the beginning of the year there is a certain interest in seeing how air action has developed since war was declared on September 3. From the very tentative explorations of the English and Scottish coasts by German aeroplanes, and photographic flights over Germany, and long reconnaissances very high up over Germany by the R.A.F. we have now progressed to quite important fights between air forces over strictly military areas.

The official and semi-official accounts of the action over Heligoland on December 18 are a trifle confusing. The Air Ministry report says that our bombers shot down twelve Messerschmitts which were said to be apparently half the number of attacking machines which appeared. After all, twenty-four fighters is not a very big force even though they might be the newest two-motor, two-seat fighters. At most it would represent two squadrons, and probably only one at full war strength.

Our official account says that seven of our machines were "unaccounted for." There is an ambiguity about that phrase which might be cleared up. If a machine be seen to land in enemy territory it is just as much accounted for as if it landed on its own aerodrome. Machines which are unaccounted for are those which have disappeared.

When the German official statement says that thirty-four British machines out of forty-four were shot down by, apparently, twenty-four fighters (according to our own official account), the statement is palpably absurd. Our own official statement says that thirty-four is more than double the number of our machines which were there.

Another German story says that our machines were Vickers Wellingtons, and as these machines are so fast and so well armed the story must be ridiculous. Moreover, one of our Wellingtons brought down five Messerschmitts, which leaves seven for all the rest of our squadron or wing, or whatever it was, of about fifteen or sixteen machines.

This Security Patrol business might also be more fully explained officially than it has been. Obviously the idea is to keep down the German minelayers. Bombers are used for the purpose because of their long range. And the fact that Bristol Blenheim bombers of a somewhat modified type were equipped as long-range fighters was well known all over the world before war was declared. But the idea of sending bombers down to machine-gun enemy air bases instead of bombing them into the water—because if bombs were dropped on land the result might grow into reciprocal bombing of manufacturing centres—must strike everybody as rather like playing at war.

None of us wants to be bombed, or wants to see our friends bombed. But no war is going to be won by machine-guns against seaplane bases.

In the R.A.F. itself there is much discussion of the recent decision to employ women as pilots of elementary training machines from the makers' aerodromes to the R.A.F. training schools. I have been told that the women pilots are to be paid at the rate of £600 to £700 a year for this work. On equally good authority I have been told that the women pilots are *not* to fly new machines from the makers to the schools, but that they are to fly old machines in company with the new machines, so that the mere male pilot of the new machine can fly back home with the woman pilot in the old machine.

This strikes me as expensive and wasteful of man-and-woman-hours. Surely a more efficient way would be to fly the new machines to the schools in batches and to send an old multi-seater passenger machine with either man or woman pilot to bring them back.

But that is not what worries the R.A.F. people particularly. They are accustomed to extravagance in money and man-hours. What worries *them* is the injustice of paying women at the rate of £12 a week or more—or, in fact, paying them anything at all—when thousands of competent male pilots who have been called up from the Reserve of Air Force officers and from the R.A.F. Volunteer Reserve, and have lost their civilian jobs in consequence, are walking around waiting to be mobilised, and drawing no pay, or drawing an N.C.O.'s pay, and doing no flying.

Another thing that worries the R.A.F. is that a number of first-class professional ("B" licence) pilots, who have been for years on the R.A.F. Reserve, some of whom have been air-line pilots with good records of thousands of hours' flying, and others who have been chief instructors at civil flying schools at which they have trained dozens of pilots for the R.A.F. (short service, R.A.F.O. and R.A.F.V.R.) have been mobilised, and, because of their ages, have been refused commissioned rank.

Some of these men have been earning between £800 and £1,200 a year, and most of them have wives and families. They now become sergeant pilots, and have to click their heels and salute youngsters who were their pupils six months ago, or men who were their subordinates a few weeks ago. And as sergeant pilots they get £4 10s. a week, plus 1s. 11d. a day subsistence allowance for board and lodging, and they go on instructing, while the women get £12 a week for ferrying.

**EXQUISITE PRECISION**

Drury and Ramond, the clever ballroom dancers, who are a great success in Grosvenor House's new war-time cabaret

# PHILIP PAGE ON THE THEATRE

## The West End's Only Panto, and Other Shows of the Week

LET "royalty" take first place among the Christmas shows, so here goes for "King Panto" (though why pantomime should traditionally be invested with such honour I have never understood). So far as the West End of London is concerned it is a solitary monarch this season, *Cinderella* at the Coliseum (it was originally to have been produced at Covent Garden) has no immediate rivals. That is not to say that it is an unrivalled show.

In the first place, it is not a particularly funny one, so far as the "book" is concerned. The Baron and Buttons (Mr. Leslie Holmes and Mr. Leslie Sarony) put up as brave a fight as possible, the latter rarely leaving the stage, and both of them inducing the audience to join in a nonsensical chorus song, rather unwillingly it seemed to me. I have an idea—it may, of course, be a wrong one—that the majority of people do not like being asked to sing in the theatre; many certainly remain silent, looking bored and embarrassed. Miss Joan and Doris Fred-Emney were duly ugly as the Ugly Sisters and sometimes quite funny.

But it is a poor "book" and the laughs, of which there were plenty, came for the most part from the "knock-about" fun. This, thanks to the Three Loose Sinews (broker's men) and the admirable fooling of Mr. Charlie Jass—the perfect ass. That is to say, he was the best and funniest animal impersonator I have seen for a long while.

The sentimental and spectacular sides of this pantomime are first-rate, with Miss Patricia Burke as an ideal Principal Boy and Miss Joan Cole a Principal Girl as sweet as nougat. Both can sing well. Ballets, transformation scenes, etc., could not have been better.

**"Shephard's Pie."**—The knock-about fun is also the best part of this cheery revue which Mr. Firth Shephard has produced, just at the right time, at the Prince's Theatre, with such staunch and cheerful "regulars" as Mr. Sydney Howard, Mr. Arthur Riscoe, Mr. Richard Hearne and Miss Vera Pearce to help him out. Splendidly do they do so, and that "Chamber music" episode, in which the first three take part, is a masterpiece of comical muddle which is to be seen rather than described; indeed, it would not seem at all funny were I to describe it.

Mr. Hearne, with his comedy dancing and amazing tumbles, all in the "make-up" of an elderly colonel, is one of England's really great comedians. Miss Pearce, though she has one poor song, is plumply successful throughout. Mr. Riscoe led some chorus-singing. For comment, see above. There was some "straight" singing by Mr. Raymond Newell, and very good it was. I congratulate him on reviving several charming drawing-room ballads, and in singing them, concert fashion, in ordinary evening dress.

**"All Clear."**—This revue at the Queen's is a far more sophisticated affair and I enjoyed it less than the Prince's show, though not on that account. I am a devoted admirer of the art of that High Priestess of Sophistication, Miss Beatrice Lillie, who pervades the show, and in at least two episodes she was superb—as an alleged spy and as a bored and haughty stage beauty disdaining (but accepting) jewelled gifts. But only too frequently the material was unworthy of her and of any revue. And I absolutely refuse to be amused by references to surgical operations on tom-cats, and by choir-boys, in cassock and surplice, showing each other smutty photographs.

Mr. Bobby Howes is, of course, good in all he does, though there is not very much for him to do. Mr. Fred Emney makes a gloriously and hilariously rotund appearance as a barrage balloon. We see far too little of dainty Miss Jean Gillie and of graceful and sweet-singing Miss Adele Dixon.

**"Somewhere in England."**—About the only surprise involved in *Somewhere in England*, which may be a musical-comedy and is beyond question at the Lyric Theatre (or was one night last week), is that several people so experienced in matters theatrical should have put it on in its present form. The plot seemed to concern the mistakes about the commandeering for war purposes of a country house, in which we saw staff officers, chorus girls, Mr. Will Hay and Mr. Claude Hulbert (neither of them vastly funny), Miss Marie Löhr (almost wholly wasted) and that admirable Gilbert and Sullivan star, Mr. Leo Sheffield (wholly wasted). There was also a jazz band, which waxed clownish at times.

The cabaret entertainment, of which the latter portion consisted, was much better, for Mr. Nat. D. Ayer sings at the piano as charmingly as he did in the last war and his new songs should be as popular as his old ones, and there are also remarkably good dancers.

**"You, Of All People."**—There was something tantalising, or worse, in seeing a small but first-rate company trying to put some sort of life into this footling little play at the Apollo about a silly woman who, married to a pompous K.C., flirted with her divorced husband. Mr. Leslie Banks, that clever actor, was hopelessly miscast (Mr. Robertson Hare was obviously the man) and so was Miss Margaret Rawlings whose soul-throb voice and melodramatic manner are not for light comedy. Even Miss Lilli Palmer, bewitchingly lovely and, as ever, full of brains, could do but little.

**"The Messiah."**—With the coming of Christmas come also performances of the great Handel's masterpiece, *The Messiah*.

The Queen's Hall was packed for the excellent performance under the conductorship of Dr. Harold Darke. I was vastly impressed, not only, of course, as I always am, by this mighty music of a supreme genius (about whom, by the way, Mr. Compton Mackenzie, in his recent book on music, chose to write in witheringly sarcastic vein) but by the audience. This was the most completely representative gathering I have seen since the outbreak of war.

Young lads in khaki sat beside elderly parsons. There were glamour girls in grotesquely fashionable hats and ladies of an older vintage, less fashionable but, some of them, not less grotesque. I saw a couple of French officers in uniform, and a British Admiral of the Fleet, also in uniform. I saw a negro and three Japanese. And there was not a seat vacant.

Dr. Darke secured a sound and musicianly rendering and, within limits, let the music look after itself. That is the right way with Handel; I have known more eminent conductors play tricks with him, hurry the *tempo* here and slow it down there—anything, in fact, to break with tradition in a desire to be dramatic or original.

The chorus on this occasion consisted of members of Dr. Darke's sensible "drop in and sing" movement—i.e. keen amateurs with good voices who belong to choral societies suspended during the war, and to church choirs. And a most sensible movement it is. Handel's own accompaniments were used (also sensible) and played by the London Symphony Orchestra. The quartet of eminent soloists consisted of Miss Lisa Perli, Miss Astra Desmond, Mr. Walter Widdop and Mr. Arthur Fear. Mr. Widdop was particularly good in the exquisitely poignant "Passion" recitatives and in his singing of "Thou shalt break them in pieces like a potter's vessel."

### SHOWS TO SEE

**Criterion:** *French for Love.* Alice Delysia, Cecil Parker.

**Hippodrome:** *Black Velvet.* Vic Oliver, Roma Beaumont.

**Little:** *Herbert Farjeon's Little Revue.* Hermione Baddeley, Edward Cooper.

**St. James's:** *Ladies in Retirement.* "London's Only Thriller."

**Saville:** *Runaway Love.*

**Strand:** *Spotted Dick.* Robertson Hare, Alfred Drayton.

**Whitehall:** *Who's Taking Liberty?*

**Wyndham's:** *Saloon Bar.* Gordon Harker.

# TWO of OUR MOST POWERFUL ANTI-AIRCRAFT WEAPONS

**GIRL WORKERS ENGAGED IN A FINAL EXAMINATION OF A BARRAGE BALLOON**

Concentrating entirely on the production of barrage balloons, a factory has recently been opened somewhere in England, and, working at full pressure for twenty-four hours a day, is manufacturing balloons by mass production with a staff of 400 operatives. The material from which the big envelope is made is a two-ply rubber-proofed cotton. The silky appearance is due to the coating of powdered aluminium

**THE TERROR OF THE LOW-FLYING ENEMY: THE MULTIPLE POM-POM**

This is the first detailed picture we have been able to give our readers of the ·5 Vickers multiple anti-aircraft gun which sends such a powerful rain of shells that no pilot would willingly get near it. The view is taken dead in front, showing the four cone-shaped muzzles in perspective, with the ammunition drums on each side. This weapon and the balloon shown above are two A.A. weapons peculiarly disliked by attacking planes

# ROYALTY ATTENDS A

**THE CIRCUS COMES TO TOWN AT THE EMPRESS HALL, EARLS COURT**

London has a circus this Yuletide season in spite of the manifold difficulties of getting together an effective team. These trapezist's do a graceful and daring turn

**WHIRLING AT HIGH SPEED ON ROLLER SKATES AT EARLS COURT**

The Ayres Trio do a brilliant turn at the Empress Hall, Earls Court, doing wonderful things within the limits of a table-top. *Below*—The clowns making ready behind the scenes

**QUEEN MARY GOES TO A FIRST NIGHT—IN A VILLAGE HALL**

Queen Mary went to a first night a few nights Royal Box. Queen Mary sat in a village hall mas concert given by the schoolchildren of Beaufort, and the Duchess of Beaufort, Lady-in

**AN EARLY ARRIVAL IS BROUGHT IN TO THE FIRESIDE BY A SUSSEX FARMER**

The first lamb on a farm at Woolbeding, Sussex, was found by a shepherd dying of cold in a field. He took it to the farmhouse, where, now thoroughly domesticated, it lives with the farmer, Mr. E. R. James, and his family

# VILLAGE CONCERT And Other Yuletide Scenes in Town and Country

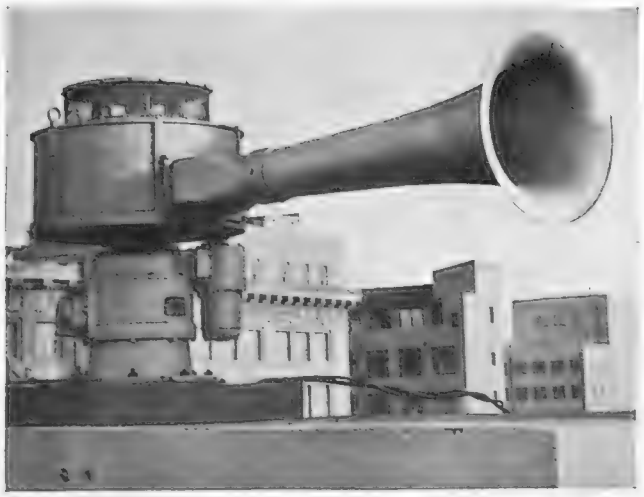
ago—an unusual first night without crowds or presentations, and no and had children sitting round her feet. The occasion was a Christ- a Cotswold village. With Queen Mary were the Dowager-Duchess of Waiting, on her left, and the Vicar, the Rev. W. S. Llewellyn, on her right

**BACK TO THE COUNTRY AFTER A CHRISTMAS VISIT TO TOWN**

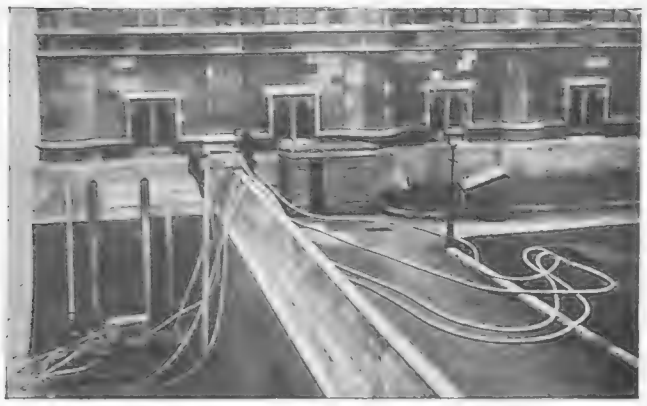
This picture shows little Londoners returning to the country with presents and masks. *Below*—Owing to the number of children now in Southwark, schools have had to be reopened, like this one in the Bethwin Road

**THE ZOO TAKES THE ANNUAL CENSUS OF ITS POPULATION**

The annual census and valuation of the inmates of the London Zoo was in full swing last week. In 1938 it was estimated that there were 4,000 animals and birds, etc., valued at £40,000. The war has, however, now made a difference. *On left*—Nobby and Daisy (two lynxes). *On right*—A Ural owl; and *below*—The porcupines being listed

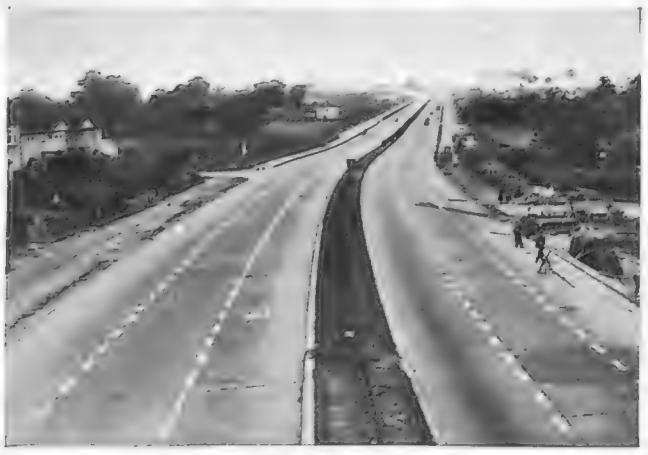


THE SIREN'S EFFECT ON THE NERVES: According to Dr. Edward Toulouse, President of the French League of Mental Hygiene, the wailing of an air raid siren is more likely to cause nervous and mental disorders than actual bombing, and he pleads for a softer-voiced alarm



ENSURING THE SAFETY OF THE HOUSES OF PARLIAMENT: A powerful fire pump has been placed on a floating raft that rises and falls with the river at the Houses of Parliament. It supplies the fire hydrant system of the House, making it independent of the mains

A RADIUM WELL: Sinking a deep well underneath the Westminster Hospital's bombproof shelter in order to house the six grammes of radium which the hospital possesses and which is valued at over £30,000. In the event of an air attack, the radium would immediately be lowered into the well



KINGSTON BY-PASS, WAR-TIME VIEW: This once heavily thronged artery as it appears on any mid-week afternoon as the result of the petrol rations

# THE BLESSING OF THE WHITE LINE

## The Fog Conditions of the Last Few Days Have Taught Many of us to Appreciate the Guiding Lines on our Roads

**By A. PERCY BRADLEY, M.I.A.E., A.M.I.Mech.E.**

*(Clerk of the Course, Brooklands)*

NOW that we have had real fog conditions this winter, we can appreciate how much better off we are with the white lines painted on practically every road, even if these lines have lost much of their original whiteness through mud and wear. The faintest of white lines is a real blessing in mist or in darkness, and if anyone should doubt that statement I suggest that a run down a road where no attempt has been made to provide a guiding line will convince the doubter that I am correct.

When I drive home from the office each evening I am unlucky enough to have to cover 2 miles of narrow, twisty country lanes at the end of the journey, and there no attempt whatever has been made to help the driver to pick out the road by paint or by any other means. It is really nerve-racking. I suggest, therefore, that the grousers who complain when the white lines get dirty should take a drive down such country byways, and they will soon realise that even a dirty white line is a godsend.

Millions of gallons of paint must be used, or will be used, each year on the roads of this country, and there must be an army of formidable size engaged in painting. In my travels I find that this work is undertaken in different ways. First of all, we have the primitive method of painting the line by ordinary paint-brush. Then one frequently sees the same job being carried out with a spray-gun, and, thirdly, I have noticed in some places that a machine rather like a tennis-marker is employed. The first method, of course, must be terribly expensive, terrifically slow, and unnecessarily fatiguing to the painter. The second is quicker, but the third is probably the best. Not one of these methods, however, strikes me as being the right way to tackle the job and I feel certain that in other countries paint is not applied to the highway by such primitive methods.

It would not require an outstanding amount of ingenuity to design and produce a machine actuated by a small petrol engine that would go along the road like a motor-mower and paint either a continuous or dotted line by means of a revolving circular brush fed continuously with paint. For the dotted line the operator would have a control which would raise the brush off the surface of the road so as to leave the necessary blank spaces between the dots. Better still, the movement of the brush up and down could be automatically controlled. If such a machine is in existence it seems strange to me that the various road authorities do not employ one, for it would save money and work so quickly that the lines would always be practically perfect.

I have just remembered that I have never noticed men repainting white lines make any attempt to wash off the surface dirt before they paint. I believe that if the lines were washed, say once a week, their whiteness would be restored and much money would thereby be saved. After all, traffic to-day is not very heavy and it is difficult to believe that the paint can be worn away very rapidly.

The other day when I was driving a small car the atmosphere was very chilly and I noticed that I overtook a number of stationary cars with their drivers vigorously wiping the windscreen to remove ice. Cars coming in the opposite direction seemed to be worried in the same manner and so I began to wonder why I was able to travel along with a perfectly clear windscreen, though I must confess that I had the wiper in operation. That same morning when I arrived at my destination I happened to meet two friends of mine who had driven similar cars to the one I drove and they told me that they had had to stop and clear their screens. It was not until some time afterwards that I discovered the explanation.

The bonnet top on my car boasts of several louvres and the fan blows the hot air through these louvres on to the outside of the screen. The reason why my two friends were not so lucky as I was was because they had removed the fan from their cars. Definitely, there is an advantage in having louvres on the top of a bonnet, particularly when they are close to the screen. The car I was driving was of foreign make but I would seriously suggest that British manufacturers should copy when new models are introduced.

Reports have come to me from many different sources that the police in some parts are once again becoming active in working speed traps. Every right-thinking motorist is a law-abiding citizen and does not complain too much when the men in blue are employed in catching drivers who indulge in high speed in thirty-mile limits, but I think most of us find it difficult to approve of policemen being used for this purpose under present conditions, particularly when special constables and temporary war policemen are being employed to assist the regular force.

Another reason why these quite expensive people should not be hanging about looking for technical offenders is because there is much more valuable work which they could be doing to assist all road users and to minimise the danger of the road. For instance, they could very well pull up, caution and, if necessary, prosecute drivers who career along the roads during black-out hours with peace-time sidelights. So far as my observations go, very few drivers have made any attempt whatever to comply with the lighting regulations so far as side lamps are concerned. Apart from the danger which these unmasked lamps create as a guide to enemy aircraft, they are definitely dazzling to oncoming drivers whose own shielded lamps will not penetrate the darkness behind the oncoming car with bright sidelights.

Driving in black-out hours must, of necessity, be fraught with greater risks than during the times of peace, but that is no reason why a large number of thoughtless drivers should increase those risks for others. No elaborate machinery is required by the police for pulling up these offenders, and the sooner it is done the better.

The secretary of the R.A.C. has asked me to draw the attention of officers and men of the Navy, serving afloat or on foreign service leave, or in first-line Fleet Air Arm squadrons, Army and R.A.F., personnel from the B.E.F., and members of operational crews of the R.A.F. stationed in the United Kingdom who are now coming on leave, to two items which affect them if they are proposing to drive a car in this country.

First of all, the Government has agreed that all such officers and men may receive a supplementary ration of petrol equivalent to approximately 300 miles for use during their leave. This is obtainable by filling in Form R (MS) 1 and forwarding it together with the registration book of the vehicle and also the leave pass to the appropriate Divisional Petroleum Officer who will then issue the necessary coupons. Secondly, it is now an offence to park a motor vehicle on the off-side of the road during the hours of darkness.

It has been the custom of the R.A.C. during the winter season to collect reports on weather conditions in all parts of the country for the information of members and also for publication through the press and the B.B.C. The R.A.C. will continue to issue such reports, but in view of the fact that information regarding the whereabouts and density of fog might possibly be of value to enemy aircraft, it is proposed to omit any reference to fog in all future R.A.C. weather bulletins.

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## THE SHAFTESBURY HOMES AND "ARETHUSA" TRAINING SHIP

In the passing of H.R.H. Princess Louise, Duchess of Argyll, on Sunday, December 3, this Society lost not only one of its Patrons, but one who took a keen interest in the Girls' Branch of the work—Esher Place. It was in 1935, when this Society was approached by another century-old Society, The National Society for the Protection of Young Girls (Princess Louise Home) with a view to amalgamation, which came into effect soon after, that Esher Place became "Esher Place (Princess Louise Home for Girls)." Every girl entering the Home is given an opportunity of preparing for a successful career. Will you please send donations towards helping this branch of the Society's work? Your donation will be gratefully acknowledged from the Headquarters at 164, Shaftesbury Avenue, London, W.C.2

# THE EUROPEAN SCENE from Week to Week

**MOSCOW SIGNS A NON-AGGRESSION PACT WITH THE FINNISH PUPPET STATE**

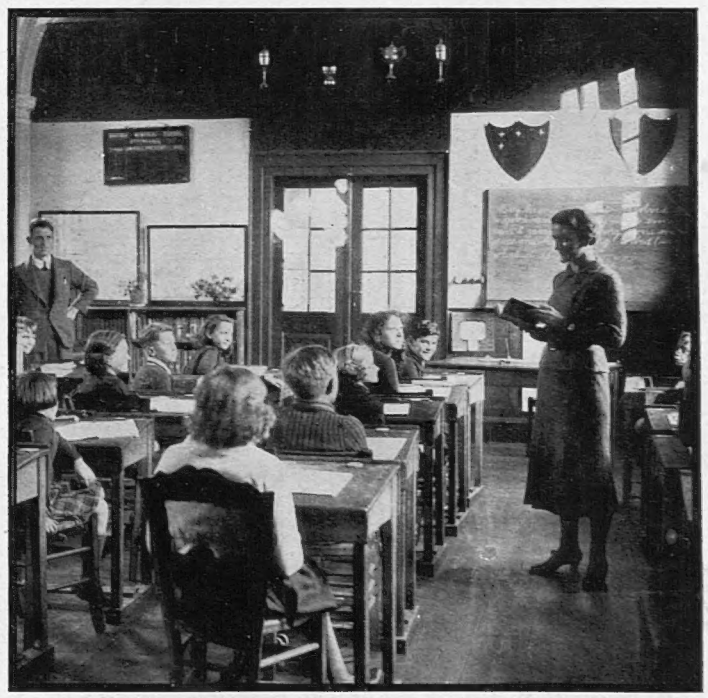
This picture shows the signing of a pact between the Russians and the puppet state set up by the Soviet under Otto Kuusinen, Finnish Communist. The signing of the treaty took place in Moscow. Molotov, the Soviet Foreign Commissar, is seen signing the treaty; and standing, from left to right, are A. Zhdanov, Voroshilov, Stalin, and Otto Kuusinen, who, according to the Soviet, is "Chairman of the People's Government"

**CAMBODIA IN PARIS**

Prince Sisovath of Cambodia arrived a few days ago in the French capital in order to join the infantry

**THE VISIT OF THE KING AND QUEEN OF ITALY TO THE POPE AFTER A TEN-YEAR INTERVAL**

Their Majesties, with a suite of over forty people, including Count Ciano, visited the Pope just before Christmas. This was the first Royal visit to His Holiness in the Vatican for ten years, when the King and Queen visited the Pope on the occasion of the signing of the Lateran Treaty

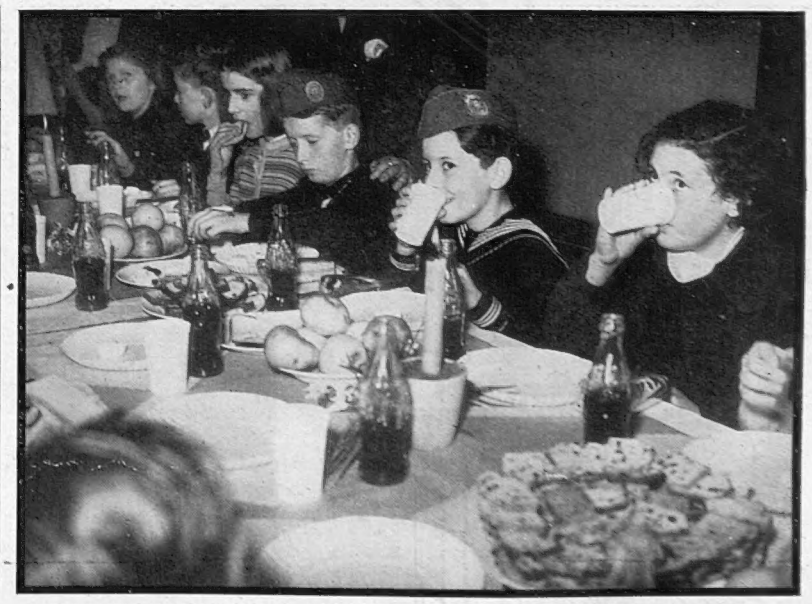


**YPRES SCHOOL CONTINUES TO INSTRUCT THE CHILDREN OF THE GARDEN-KEEPERS**

The British School at Ypres, formed as a memorial to Old Etonians, is continuing in spite of the war. Only English may be spoken during school hours

**A BRIDGE IN THE HEART OF PARIS COLLAPSES AFTER BEING DAMAGED BY A BARGE**

The bridge connecting the famous island in the centre of Paris collapsed after a barge had collided with a pier. This picture shows one of the abruptly-terminated approaches



**THE PARIS AMERICAN LEGION ENTERTAINS U.S. CHILDREN**

During the Christmas holiday the Paris post of the American Legion staged a Christmas party for the American children in Paris. Here are some of the youngsters enjoying the banquet that was served

# In Quest of Good Hotels

By ASHLEY COURTENAY

## An Anglo-French Christmas Luncheon in London Under the Auspices of the Wine and Food Society

CHRISTMAS, 1939, is over and soon its memory will be obliterated by its predecessors, some gay, others homely, and I hope none that could be considered dull. And yet somehow this Christmas may remain fixed in our memories, seeing it was our first war-time Christmas, at least since 1919.

There were some who predicted that there would be no Christmas festivities this year and yet when the time came hotels were filled to capacity, and London was as crowded as ever.

One of my recollections of Christmas, 1939, will be the Christmas luncheon of the Wine and Food Society which as a member I attended at the Dorchester on December 20, with Mr. Andre L. Simon in the chair. Here was the fare :

Flamiche Amiénoise
Fricassée de Poule d'Inde
à l'Ancienne
Doucette de Paris
Plum Pudding
Mince Pies
Café

which, with the exception of the coffee, was washed down with excellent Pommery and Greno, 1929, champagne.

It was an interesting luncheon because it departed from the generally accepted fare. I suspected the first course, Flamiche Amiénoise, to be tripe served up in a new way, but on reference to the useful little commentary with which we were all provided I was enlightened as follows :

"*Flamiche*, sometimes called *Flamique*, is a kind of *Flan*, a light paste filled with the white of leeks, boiled, shredded, steeped in beaten yolks of eggs and cream and then *gratiné* under a very hot grill. In plain English it might be called a *leek custard*, and in not so plain Welsh it would be called something else. *Flamiche* is a local name, and in Picardy this leek custard is a usual Sunday dish at this time of the year in humble peasants' cottages.

We have added *Amiénoise* as a tribute to the industrious market-gardeners of Amiens, who supply most of the leeks for the *Flamiches* of Amiens."

After that came the usual *pièce de resistance* of any Christmas lunch—the turkey, but at least to my mind unrecognisable for it was served with a surfeit of rice and it might have been fricassée of chicken.

At the same time, to do justice to the Wine and Food Society I should reproduce from the commentary already referred to the explanation of this fricassée de Poule d'Inde.

"*Fricassée de Poule d'Inde à l'Ancienne.* The *Poule d'Inde* was the first and for a long time the only name given in France to the turkey, a bird which was introduced to both England and France from America and not from Turkey or from India. Then the *Poule* was dropped and the bird became *Dinde*, the male *Dindon* and the poult *Dindonneau*.

"Turkey is considered a luxury because it is expensive and extravagant. It is a noble bird ; it is difficult to rear and costly to feed ; hence it can never be cheap, but it need not be extravagant.

"It is extravagant when the whole of the company present feed upon the breast of the roast turkey, plus a liberal helping of some rich stuffing, the *farce*, which is troublesome to make and troublesome to digest. To-day the whole of the turkey has been used and no stuffing. It has had time to simmer gently in the company of onions and mushrooms so as to be tender and tasty, more economical and more digestible than the usual roast turkey and stuffing."

Whilst one appreciates the objective of making full use of the whole turkey instead of just the breast, I still contend that our English conception of roast turkey, i.e., the breast of the bird with all the etceteras is far more in keeping with the spirit of Christmas Day than this very much disguised dish.

Alas for the plum pudding which followed. To my way of thinking it was wet and soggy. And whilst thanking the chefs of the Dorchester, Messrs. Richard and Kaufeler, for the cooking of the rest of the fare, one could not help feeling that the art of cooking plum pudding is never to be found in the hotel kitchen, but only in our English homes.

Boxing Day found me at a dinner at the Beach Hotel, Littlehampton—an hotel I had not visited for some time. A first-class hotel situated in a picked position on Littlehampton Green.

I was more than ever impressed with its excellence as regards service and cuisine and its attractive dining room, cocktail bar, and sun lounge. But if I am to add a word of criticism it is that all hotels who attempt anything in the nature of Christmas festivities, be it dancing, concerts, or whatever it may be, should have a social organiser, whether hostess, or the management themselves. In consequence, Christmas-time at the Beach tended to fall a little flat.

*Mr. Ashley Courtenay is always pleased to advise "Sphere" readers of hotels, both large and small, known to him personally. Letters should be addressed to him, c/o the Editor,* THE SPHERE, *32-34, St. Bride Street, London, E.C.4. Personal and telephone inquiries, however, cannot be accepted.*

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By Charles Spencelayh

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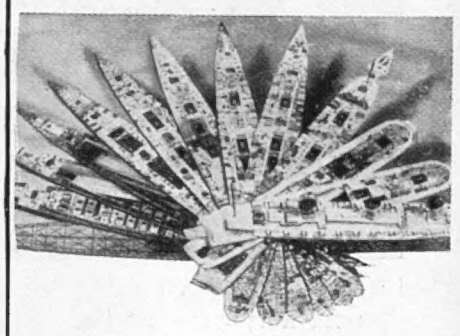

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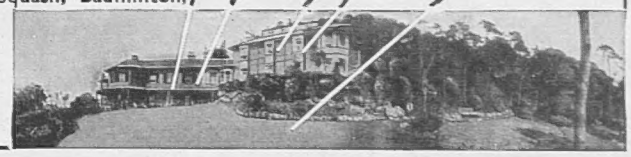

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*The majority of these hotels are personally known to our Hotel Correspondent, Mr. Ashley Courtenay, who will be pleased to give further details regarding them to readers who write to him, c/o " The Sphere."*

## ENGLAND

**Aldeburgh.**—Wentworth Hotel. Tel. 312 & 313.
**Bath.**—Lansdown Grove Hotel.
**Bexhill-on-Sea.**—Hotel Riposo. Tel. 472.
**Blackpool.**—The Headlands. A.A. & R.A.C.
**Bognor Regis.**—Royal Norfolk Hotel. Tel. 40.
**Boscastle.**—Welltown Manor Guest Hse. Tel. 17.
**Bournemouth.**—Bourne Hall Hotel. Tel. 5.
**Bournemouth.**—Canford Cliffs Hotel.
**Bournemouth.**—Hinton Firs Hotel.
**Bournemouth.**—Tollard Royal.
**Brighton.**—The Kings Hotel.
**Burley (New Forest).**—Burley Manor Hotel.
**Bushey.**—Bushey Hall Hotel.
**Cambridge.**—Blue Boar Hotel. Tel. 3030.
**Chagford (Devon).**—Easton Court.
**Chipping Campden.**—Cotswold Hse. Htl. Tel. 330
**Droitwich.**—Raven Hotel.
**Dulverton.**—Carnarvon Arms.
**Dulverton (Som.).**—Woodcote Hotel. Tel. 129.
**Exmouth.**—Maer Bay Hotel.
**Falmouth.**—Greenbank Hotel.
**Folkestone.**—Queen's Hotel. Telephone 2219.
**Goring-on-Thames.**—The Bull. Tel. Goring 57.
**Hove.**—Dudley Hotel. Completely modernised.
**Leatherhead.**—The Red House Hotel.
**Lytham St. Annes.**—Clifton Arms Hotel.
**Lyme Regis.**—Hotel Alexandra. Tel. 10.
**Manchester.**—Bowdon Hydro.
**Ninfield (nr. Battle).**—Moor Hall Hotel. Tel. 30.
**Ockham.**—The Hautboy. Ripley 20.
**Paignton.**—Ravenswood. Cliff Road.
**Plympton (nr. Plymouth).**—Elfordleigh Hotel.
**Ross-on-Wye.**—Mount Craig Hotel.
**St. Leonard's-on Sea.**—Royal Victoria Hotel.
**Salisbury.**—Old George Hotel. Tel. 3189.
**Sanderstead (Surrey).**—Selsdon Park Hotel
**Scarborough.**—The Grand. 'Phone: 1053.
**Shaftesbury (Dorset).**—Coombe House Hotel.
**Sidmouth.**—Cedar Shade Hotel.
**Sidmouth.**—The Torbay Hotel.

## ENGLAND—*continued*

**Torquay.**—Park Hall Hotel.
**Torquay.**—Roslin Hall Hotel. Tel. 4373 (2 lines)
**Treyarnon Bay (Cornwall).**—Waterbeach Hotel.
**Twyford (Berks.).**—Grove Hall Hotel. Tel. 109.
**Washington (Sussex).**—Clematis Cottage Hotel.
**Weymouth.**—Royal Hotel. Tels. 627 & 628.
**Worthing.**—Greystoke Private Hotel. Tel. 991.

## GREAT NORTH ROAD

*(Figures in brackets show mileage from London)*

**Catterick (229).**—Bridge House Hotel.

## ENGLISH LAKES

**Keswick.**—Borrowdale Hotel. Borrowdale 24.
**Keswick.**—Royal Oak Hotel.

## LONDON

Ambassadors Hotel, W.C.1. Tel. Euston 1456.
Bailey's Hotel, Gloucester Road, S.W.7.
Dorset Square Hotel. Off Baker St., N.W.1.
S. Kensington Htl. Queen's Gate Terrace, S.W.7.
United Services Hotel, S.W.7. Tel. Wes. 7131.

## SCOTLAND

**Tomintoul (Banffshire).**—Richmond Arms Htl.

## WALES

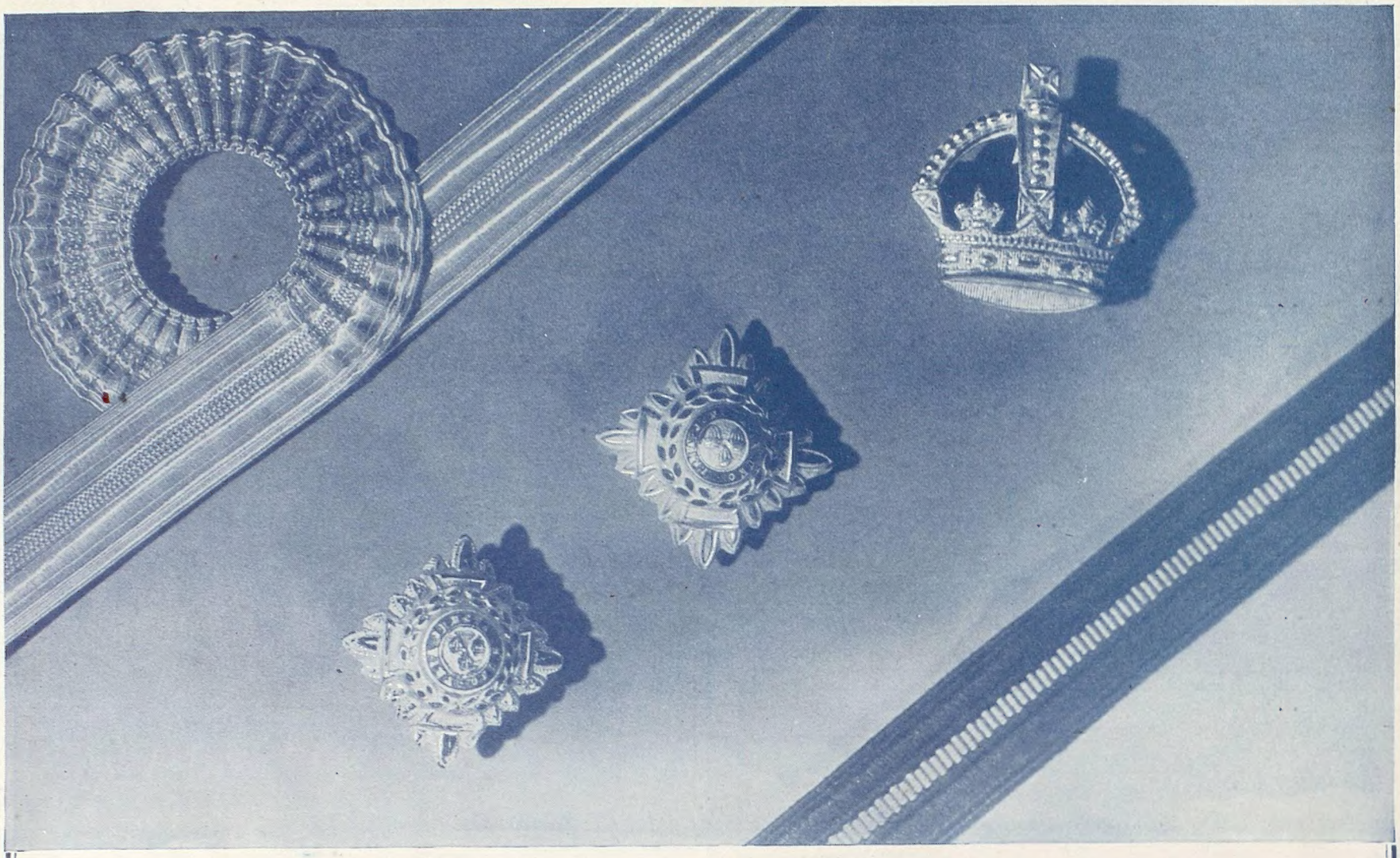
**Llandudno.**—Imperial Hotel. Facing sea.
**Llangollen.**—The Hand Hotel.

## NORTHERN IRELAND

**Belfast.**—Grand Central Hotel.
**Rostrevor.**—Great Northern Railway Hotel.

## EIRE

**Dun Laoghaire (Kingstown).**—Ross's Hotel.
**Glendalough (Co. Wicklow).**—Royal Hotel.
**Greenore.**—Great Northern Railway Hotel.
**Greystones (Co. Wicklow).**—Grand Hotel.
**Kingstown (Co. Dublin).**—Royal Marine Hotel.

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